

K.E. Voroshilov had two classes of education for two (Voroshilov still went to elementary school for two winters). In such

a situation, only the one who guessed the leader's momentary tastes, or rather, and better, could impose them on him, could win in such a strange "socialist competition" (this is precisely what distinguishes the bureaucratic "undercarpet fuss" from a normal technical competition).

Vivid and memorable pictures of what, on the eve of the war, replaced the serious and painstaking work on shaping the appearance of a new generation of combat aircraft, are scattered across the pages of the memoirs of the leader's favorite adviser, A.S. Yakovlev.

... In the office, Stalin and Voroshilov about something animatedly talked. We greeted each other, Stalin immediately asked:

- Here we are arguing with Voroshilov, what is more important for a fighter - speed or maneuver? Are you sure that we are not mistaken in focusing on fast fighters? "I'm sure, Comrade Stalin," I replied. "I think so too," Stalin said, "but he

doubts.

- Stuffy today. - Voroshilov unbuttoned the collar of his marshal's tunic ...

... Stalin asked a few questions ... I was amazed at his knowledge. He spoke like an aviation specialist. "What do you think," he asked,

"why do the British put small-caliber machine guns on Spitfire fighters, and not cannons?" "Yes, because they don't have air guns," I

answered. ***(The 20-mm Hispano-Suiza cannon, which was in service with French, British and American aircraft, was put into production in 1935, that is, four years before the conversation described by Yakovlev.)***

- I think so too, - said Stalin And he said in pursuit: - But all the same, the British are fools that they neglect the gun ...

... Stalin. Molotov and Voroshilov were very interested in my BB (Yak-2) car and everyone asked how it was possible, with the same engines and the same bomb load as the SB, to get a speed exceeding the speed of the SB. ***(with "the same***

bomb load, as in the "SB" "Yakovlev's plane could not even get off the ground. - M.S.) I explained that it's all about

aerodynamics, that the "SB" was designed 5 years ago, and science has advanced far forward during this time ... Stalin kept walking around the office, wondering and

saying: - Miracles, just miracles, this is a revolution in aviation.

It was decided to launch "BB" into mass production ...

So, in a creative discussion with people's commissars and a young, but early "consultant", Stalin found one simple (many complex ones simply could not fit in the mind of a person overloaded with a million cases and worries) criterion for evaluating a combat aircraft. The criterion was SPEED. And this can still be considered our common luck. Speed is good. A bad plane won't fly fast. It's scary to think what you would have to fight on if there was a young careerist next to Stalin pushing, for example, the project of some high-altitude "stratoplane" with round windows, like on an underwater bathyscaphe ...

From the moment Stalin decided that the entire complex and interconnected set of flight and tactical characteristics of a combat aircraft can be reduced to a single figure - maximum speed, this opinion, hasty and incompetent, has become an indispensable requirement for everyone. On January 25, 1940, after the change of leadership of the NKAP, a special Decree of the Council of People's Commissars of the USSR and the Central Committee of the All-Union Communist Party of Bolsheviks was adopted, dedicated to the situation in the aviation industry. It included, in particular such tasks:

a) Serial Mass

production in 1940: for fighters - 575-600 km / h, for bombers - at least 500 km / h (***no other technical parameters were even mentioned!*** - M.S.). b)

Experimental Resolutely improve the organization of experimental work

looking for ways to maximize speed.

c) R&D

Over the next 2-4 months, reorganize the work of research institutes TsAGI, CIAM, VIAM in the direction of concentrating their attention on solving the most important problems of modern aircraft construction in accordance with the requirement of high speeds.

(105)

In the light of such "requirements of the party and government," the I-200 fighter project became "doomed to success." Still, the speed is 670 km / h (with turbochargers and all 717). True, the height (11600 m), at which it was only possible (theoretically, with turbochargers that do not exist in the "metal") to develop such a speed, was so high that not a single enemy aircraft could be found on it, but who think about it? Judging by the memoirs of Yakovlev, Shakhurin and others, judging by the decisions made, no one even explained to Stalin that the maximum speed at high altitude and the speed near the ground are two different speeds.

Evaluation of a combat aircraft according to one single parameter (no matter which one) made it basically impossible for a competently and conscientiously developed project to win in the "competition for the Stalin Prize". The reader, who was not too lazy to go through a short "educational program" in Part 1, should understand this without lengthy comments. In particular, in conditions where the maximum speed became such a criterion, aircraft with an air-cooled engine turned out to be completely "impassable" (significantly greater combat survivability, simplicity and ease of maintenance in winter in the field, but greater resistance of the "lobed" motor). Shakhurin writes in his memoirs:

... before the war, they were overly carried away by water-cooled engines, since such an engine gave less drag ... it turned out that almost all fighters that entered the test in 1940 (more than 10 types), and even some bombers, had water-cooled engines. It turned out to be a clear miscalculation, although **it was difficult to convince the designers at that time (*highlighted by the author*)**. After all, everyone expected that it was his plane that would be put into mass production ...

Shakhurin is a little confused. It is not difficult, but impossible, to convince the careerists, whose all thoughts were turned to pushing their plane at any cost. "Change the designers" and was not required. It was enough not to interfere with Polikarpov with the launch of his fighters with an air-cooled engine (I-180 and I-185) into a series. Finally, Shakhurin clearly forgot that the Perm Engine Plant No. 19 (which was part of the NKAP, that is, subordinate to him, Shakhurin), the main manufacturer of air-cooled "stars",

transferred to the production of liquid-cooled engines. The plan for the production of aircraft engines for 1941 (Resolution of the Council of People's Commissars No. 2466 of December 7, 1940) provided for the production of 20 thousand M-105, 8 thousand AM-35 and not a single powerful two-row "star" (M-71, M-82), under which Polikarpov designed the I-185 fighter. And this despite the fact that in the fall of 1940 the Shvetsov M-82 engine (hereinafter - ASh-82) successfully

passed bench state tests.

It was this engine (and its further injector version ASh-82FN) that made possible the serial production of La-5, La-7, Tu-2, as well as the post-war Il-12, Il-14, helicopter "Mi-4". This engine, without any exaggeration, "fateful" for our aviation, was put into production only thanks to the extraordinary courage of the designer Shvetsov and the First Secretary of the Perm (at that time - Molotov) Regional Committee of the All-Union Communist Party of Bolsheviks Gusarov. Taking a huge, deadly risk (the former management of the plant and the design bureau was arrested in 1938), they did not comply with the Decree of the Council of People's Commissars and the Central Committee, retained equipment and equipment for the production of air-cooled motors and achieved a personal meeting with Stalin in early May 1941. (100) As a result, on May 17, it was decided to launch the M-82 into mass production, but half a year had already been lost, and the most powerful blow of all possible was dealt to the project of the I-185 fighter: no engine - no airplane...

Turning the maximum level flight speed into the only criterion for evaluating a fighter aircraft, of course, led to "obvious miscalculations." A fighter is a complex combat system, and its design cannot be reduced to achieving the maximum in any one characteristic. The characteristic itself (speed) was very important, and in an effort to please the tastes of the Owner, the designers were forced to switch to high specific loads on the wing, improve aerodynamics, develop automatic propeller pitch changers, which generally corresponded to the main path of aviation development. In a word, the development of fighter aviation was harmed, but not so great. But the absolutization of the same criterion (maximum speed), transferred to bomber aircraft, led to disastrous consequences. In the early 1940s, the task of "running away from a fighter" became more and more unfeasible, and the combat survivability of a bomber was ensured, first of all, by fighter cover, as well as the correct tactics of use (choosing optimal heights, camouflage by clouds and night haze) and an all-round increase active and passive

protection of the bomber aircraft itself. The correctness of just such an approach was confirmed already in the first months of the war. ***“Flights of bombers and attack aircraft under cover in all cases gave the most positive results in terms of bombing accuracy (in the words of the flight crew, “it was possible to work calmly”).***

With the correct interaction of bombers with fighters, there were no losses from the air enemy, and only in two cases did the bombers, remaining without cover, suffer losses. So the navigator of the 12th BAD, Major Preobrazhensky, reported on September 16, 1941. It is worth noting that

the general direction of the development of strike aviation has remained the same to this day - the technical improvement of bombers and attack aircraft is carried out according to a great variety of parameters (sighting and navigation equipment, flight range and altitude, active and passive protection, automation and redundancy of control systems, convenience for the crew), but not in the direction of increasing speeds. Modern "battlefield aircraft" (American "A-10", Soviet "Su-25") fly at a speed three times less than the maximum speed of modern fighters. And this does not surprise anyone, does not horrify, and it does not occur to anyone to call the Su-25 or A-10 "hopelessly outdated." And if they are already outdated, then by no means because of their "low speed" ... After this necessary remark, let's return to the story of the Yakovlev aircraft ("BB", also

known as "product 22", "Yak-2"). The conversation in Stalin's office did not end with a mere statement of the fact that the young designer had accomplished a "miracle" and a "revolution in aviation." There was something else that was tangible. Here is how the "magician" himself writes about this in his memoirs: ***“Voroshilov wrote something on a piece of paper and showed it to Stalin, who, having read it, nodded his head in agreement. Then Voroshilov read the text of a petition to the Presidium of the Supreme Soviet of the USSR to award me the Order of Lenin, a ZIS car and a prize of 100,000 rubles. The petition was immediately signed by all three...”*** And here some

explanations are needed. What is it - one hundred thousand rubles in 1939? We can say that these are 20 (twenty) brand new "emoks" (passenger car "M-1"). And you can (and in this context even better) say that this is 100 (one hundred) downed enemy aircraft. Yes, exactly one thousand rubles will be determined as a bonus to a fighter pilot for one downed enemy aircraft by order of the People's Commissar of Defense I.V. Stalin No. 0299 of August 19, 1941. At such prices, no one would have been able to earn 100 thousand. Yes, and half of the modest gift received

Yakovlev (not counting the ZIS, mind you), only five or six pilots of the Soviet Air Force could qualify (our Western allies did not have a single one who shot down 50 or more German aircraft).

Alas, in this case, Comrade Stalin made a mistake. That is, for the "revolution in aviation" it would be worth paying more - but only after the successful combat use of the next "miracle weapon", and not before the start of state tests of a prototype. "Product 22" was a light (5 tons takeoff weight) twin-engine aircraft of very small size (fuselage length 9.34 m versus 12.27 m for the "SB" bomber), which had neither bombs nor small arms, no radio station, armor protection, intercom, etc. During tests in the spring of 1939, a speed of 560-570 km / h was achieved. This speed, equal to the speed of the best fighters of its time and 120-130 km / h greater than the speed of the serial SB bomber, delighted Stalin. Not limited to generous gifts for the "youngest technician" Yakovlev, Stalin on June 20, 1939 (without waiting for the completion of state tests that began on May 29 at the Air Force Research Institute) decided to launch the BB-22 into mass production. And not just anywhere, but at aircraft factory No. 1. (111)

"Our business is to crow, and there - at least do not dawn ..." A.S. Yakovlev perfectly mastered this formula of relationships within the bureaucratic system. By the way, he knew how to crow masterfully. CM. Alekseev, Lavochkin's deputy aircraft designer, cites the following episode in his memoirs:

... a few months after the start of the war, the chief engineer of the Air Force, reporting on the state of affairs at the front, noted that the LaGG-3 distinguished itself by its survivability. Stalin interrupted the

report and asked: - Comrade Lavochkin, how did you manage to make such a

tenacious aircraft? Semyon

Alekseevich got up and said: - Yes, we didn't do anything special, it happened just like that **(the answer is not only modest, but also absolutely accurate. There was nothing "such" in the sense of increasing survivability on the LaGG. Chief Engineer of the Air Force, probably, did not have accurate information, especially since "a few months after the start of the war" the first LaGGs had**

just appeared at the front. - M.S.) The meeting ended, Shakhurin approached

- Oh, you hat. You had such a chance to prove yourself ... If Stalin had asked Yakovlev such a question, he would have told for half an hour - what clever people they are. And you...

(109)

After the Order of Lenin, the Stalin Prize, the black representative "ZIS" and the best aircraft factory in the country were received, Yakovlev tried to turn the "BB-22" into a full-fledged bomber. It soon became clear that this was completely impossible. A tiny bomb bay, inscribed in the space between the spars of the center section, contained exactly 2 (two) bombs "FAB-50" or two "FAB-100". Even the I-16 single-engine fighter flew with such a "bomb load". The placement of bombs in an additional compartment behind the rear spar led to a loss of stability (rear centering is unacceptable). With an additional external suspension of 4 more FAB-50s and the installation of at least minimal defensive weapons (one fixed upper machine-gun turret with limited firing angles), the speed of this "miracle" dropped to 445 km / h. The serial "SB" also flew at about the same speed, but it really flew, and on the "BB-22" the radiators narrowed to achieve the "record speed" boiled, the brakes burned during landing, and the tires of the superminiature wheels of the landing gear had to be changed after 5-6 landings . (111) In hindsight, Yakovlev came up with an excuse for himself, which he placed on the pages of his memoirs published in gigantic circulations. Stupid generals, it turns out, did not understand his

innovative plan. He allegedly designed a high-speed reconnaissance aircraft, and the military insisted on turning the "BB" into a bomber, from which all the troubles began. Strange logic. Not to mention the fact that the Yak-2 was also unsuitable as a reconnaissance aircraft (exceptionally poor visibility from the navigator's cockpit, limited range, low combat survivability), Yakovlev should remember that he "drunk" an empty aircraft of unknown purpose to the Owner as a full-fledged bomber, comparable in bomb load to the "SB"! For this, the order was received ... After a year and a half of continuous improvements, after the installation of M-105 engines of greater power, a complete replacement of the cooling system, it was possible to bring the aircraft, called the Yak-4, to the point that it flew and did not boil at

maximum speed 533 km/h. True, the Ar-2 with the same engines flew, although a little slower (515 versus 533), but it had three times the bomb load, dived steadily, had one and a half times the flight range, had a third crew member (arrow) and the third

firing point to protect against fighter attacks from behind and below. In short, the "Ar-2" was a full-fledged, proven combat vehicle, and the "Yak-4" ... Leading engineer of the Air Force Research Institute A.T. Stepanets recalls how at the end of July 1941 he had to meet with front-line pilots who fought for several weeks on the Yak-4.

How did you adopt such an unfinished aircraft? Pilots and navigators surrounded me indignantly. I feel a little more - and they will beat. What saved me was that I managed to explain: I am the chief engineer for testing Yakovlev fighters and have nothing to do with the Yak-4 ...

(111)

There was nothing to blame for the Air Force Research Institute. Despite the enormous pressure "from above" (the young technician became in January 1940 the deputy people's commissar of the aviation industry and held out for several more years as the personal consultant of the Boss), the head of the Air Force Research Institute A.I. Filin (remember, dear reader, this last name), in a report on the state tests of the Yak-2 / Yak-4, which took place in December 1940, directly wrote that "**aircraft in the tested form are not reliable and combat-**

ready." And although the December plan for the production of aircraft in 1941 provided for the production of 1300 Yak-4s, on February 12, 1941, the decision was finally made to stop the production of the "under-bomber". A total Yakovlevsky of 111 Yak-2s and 90 Yak-4s were assembled. (111) Yakovlev modestly remarks in his memoirs: "almost 600 aircraft were produced." Hey, well done...

The funny thing is not that the academician and the colonel general in one person do not know how much 111 plus 90 will be. but only cleared a place for the "product 100" born in the prison bowels of the NKVD OTB. Yes, it's not a stipulation. "Product 100" - a high-altitude high-speed fighter - it was decided to turn it into a dive bomber. And although the only thing in common between

these types of aircraft is that both of them fly through the air and land on the ground, in May 1940, an order was given to turn the "hundredth" into a bomber. The term is one and a half months. (26) And this is not a typo. Not a year and a half, but a month and a half. The reason for the haste is the same - the high estimated speed of the future bomber. "Sotka" flew (especially in calculations, at high altitude, with turbochargers absent in nature) very quickly, and the authorities had hope that

that the bomber, created on the basis of the "weave", will be both diving and high-speed.

Work boiled over. From the Ilyushin Design Bureau, Arkhangelsk Design Bureau (and even from the Yakovlev Design Bureau), almost 300 people were allocated for the new project. Thus, the design bureau of the exposed "enemy of the people" Petlyakov, which does not yet explicitly exist, has become the country's largest design team! On June 23, 1940, the working drawings were ready. (26) The first flights of serial Pe-2 bombers began in November 1940. The great interest of the Owner in the new high-speed bomber, as well as the pressure of Beria, who stood behind the OTB, resulted in a rapid expansion of the production base. For the release of "Pe-2" they immediately loaded the "flagship number two" - the Moscow aircraft plant No. 22 (this is what "drew the line" under the Ar-2 program). Then Moscow plant No. 39 (previously Ilyushinsky) was connected to the production of Pe-2, and later - a huge new plant No. 124 in Kazan and Irkutsk plant No. 125. Before the start of the war, i.e., almost six months, managed to produce 458 "Pe-2" (including plant number 22 - 296 machines, plant number 39 - 157). In total, during the war years, 11427 Pe-2s were produced, which thus became the most massive Soviet bomber aircraft.

Everything is relative. Of course, the Pe-2 looked great against the backdrop of Yakovlevsky's "miracle aircraft". Well-made, all-metal, very technologically advanced (a simple and rational shell structure of the fuselage with a minimum of reinforcing elements), very durable (inherited from the progenitor-fighter "Pe-2" received a glider capable of withstanding 12-fold overload), very tenacious (protected tanks supercharged with inert gas, armor protection for the pilot and navigator), the aircraft could cause admiration not only from Stalin, but also from real aviation specialists.



Pe-2

Yes, the practice of combat use of the Pe-2 also revealed numerous shortcomings: high (for poorly trained young pilots of the military era) landing speed, numerous cases of spontaneous combustion of the aircraft in the air (this was the "fee" for the electrical remote control of many units - motors and relays sparked and set fire to gasoline vapors), insufficient longitudinal stability (especially in the takeoff mode with full load). (105) All this can hardly be blamed on the creators of the "hundred" and "Pe-2" (Tupolev, Petlyakov, Putilov), taking into account the extreme and humiliating conditions in which they were forced to defend the "right to life" for his car (unfortunately, the life of V.M. Petlyakov himself turned out to be very short - on January 12, 1942, the Pe-2, on which he flew to Moscow, crashed ...). But was this plane a bomber, let alone a dive bomber?

High-speed high-altitude fighter is not the best "blank" for the creation of a dive bomber, that is, a low-altitude "battlefield e. aircraft". Yes, they immediately got rid of pressurized cabins that weighed down and complicated the design, it was even easier to get rid of turbochargers - they didn't exist in nature. But the very narrow (diameter 1.3 m) fuselage, in which there was geometrically no room for large-caliber bombs, remained. The heavy construction of the airframe also remained (the 12-fold "fighter" overload had to be supported by something), which, after installing everything that was needed for the bomber, also grew by 700 kg, leaving no conditional in the "existence equation" places" for the payload. The wing of a relatively small area remained, and the specific load (at normal, non-overload take-off weight) reached 186 kg/sq.m. Landing at field airfields became difficult and dangerous, especially for combatant pilots who were accustomed to the SB bomber with its low landing speed and short takeoff run.

The result was an aircraft with a normal bomb load of 600 kg, the maximum (with external suspension of bombs under the wing) - 1000 kg. This roughly corresponds to the capabilities of the single-engine Junkers-87, or the American single-engine single-seat fighter Kittyhawk. The Pe-2 combat use statistics show that the average load was just over 500 kg, and the aircraft (at least in 1941-1942) was used practically as a light "horizontal" bomber (only external bombs could be dropped in a dive). pendants, but they, as a rule, were not taken). The dimensions of the narrow fuselage bomb bay made it possible to take only bombs with a caliber of up to 100 kg (while the "outdated" Ar-2 could take a total of three FAB-500s and

drop them in a dive). In short, it turned out to be a "semi-bomber" with a very modest weight and range of bomb load, inferior in all respects to the "Ar-2". For all but one - speed. "Pe-2" (without external

suspension) flew 40 km / h faster than "Ar-2" in the entire range of altitudes. It was these 40 km / h that were recognized as the decisive argument. In fact, by demanding to turn the "hundredth" into a bomber, the bosses hoped to get higher speed characteristics, but they just didn't think that the bomber, "bristling" with gun turrets, hatches, bomb racks, would not be able to maintain the high speed of the original fighter progenitor. It is noteworthy that the computer simulation of the combat use (taking into account the opposition of enemy fighters, mind you!) carried out by modern researchers (114) of front-line bombers of the early 40s ("Pe-2", "Ar-2", "Yak-4", "ANT-58", "Junkers-88") showed that the "Ar-2" was superior to the "pawn" by 30-40% in solving any problems. The best of all - including the best of the "Junkers" - was, of course, the Tupolev "ANT-58" ("product 103"). But the history of this bomber, far ahead of its time, remains a mystery to this day. We will try to identify some possible "guesses" in the following chapters.

Chapter 16

At the beginning of 1940, the entire Soviet aviation industry, the entire huge system of large and small factories, prison and conditionally free design bureaus, training grounds and research institutes, was buzzing like a disturbed beehive. The owner could ascertain commendable diligence and agility in everything. He himself also contributed to the creation and maintenance of an atmosphere of general excitement.

On January 9-11, 1940, Stalin replaced the leaders of the people's commissariat, and this was done in such a hurry, as if there was the last day before the end of the world, which it was decided to spend on strengthening the leadership of the NKAP. Shakhurin (who at the

time of his appointment as People's Commissar worked as the First Secretary of the Regional Committee in Gorky, and a year before that he worked as the First Secretary of the Regional Committee in Yaroslavl) writes:

... In the first days of January, they called from the Central Committee. I was asked one question: "Comrade

Shakhurin, can you leave for Moscow today?" I replied that a session of the

regional Soviet of Working People's Deputies was underway, I was chairing it, and it would last all of today, and possibly even tomorrow. "Then, Comrade Shakhurin," they told me, "explain to your

comrades that you are urgently summoned to the Central Committee. Is it possible to leave immediately? The train leaves in two hours. - Then leave I realized

that the issue of my appointment was resolved. Stalin

He asked me,
"How old are you?"

"Thirty-five," I replied. "Well, you see," he threw to Yakovlev, "what a young people's commissar you have. This is good. ...The

conversation came to an end. I asked permission to go to Gorky to hand over the cases. Stalin hesitated a little, and then said:

- Cases need to be transferred in Moscow. The work that awaits you is urgent. Anyone who needs to be invited here. And we will send a representative of the Central Committee to Gorky, who will report to the regional committee on the decision taken ...

Just as young (33 years old) was the Deputy People's Commissar for Experimental Aircraft Building and Science A.S. Yakovlev. Semi-literate M.M. Stalin expelled Kaganovich with a bang, seeing him off (in Yakovlev's retelling) with the following words: ***"What kind of people's commissar is he? What does he understand about aviation? How many years he has been living in Russia, but he has not learned how to speak Russian properly!"*** Gold words. Of course, no one (regardless of the ability to speak Russian) asked Stalin about who and why two years ago appointed an ignorant upstart to lead the entire defense industry of the country. Is it possible that in 1937 M.M. understood all areas of military production better than "only" in one aircraft industry in 1940? By the way, M.M. shot himself. much later - after being removed from the post of people's commissar, he was given "for feeding and honor" not the worst, huge and new, aircraft factory No. 124 in Kazan. Clouds around M.M. Kaganovich began to thicken in the early summer of 1941, when a massacre of the leaders of the Air Force and the military industry began in the country. According to one version, L.M. Kaganovich warned his brother about the imminent arrest, after which M.M. shot himself (it happened presumably in early July 1941).

But let's return from the black summer of the 41st to the bright May of the 40th. The general mood "at the top" was "perestroika", painfully familiar to you, dear reader. That is, indiscriminate swearing at recent idols and rosy dreams that after the change of nameplates in the offices, the process will go on. With acceleration. From the minutes of the meeting

of the Commission of the Main Military Council
Red Army of May 4, 1940.

Shaposhnikov: Designers work poorly ... Designers must carefully process the drawings and move more brains.

Voroshilov: The government took all measures to interest the designers. They were paid 1.5 million rubles for each car, that is, 1.5 times more than the cost of the plane.

Pavlov: If we pay so much to designers, then we there will be no cars. It is necessary to apply other methods - harder.

Mehlis: But the designers still got fat. Pavlov:

They didn't get sick (***as in the text. - M.S.***) of the designer, but sabotage.

Shakhurin: Polikarpov, Arkhangelsky and Ilyushin were over-praised. Between individual designers and pilots there was a spike, which prevented the aircraft industry from moving forward. Pavlov: How long did M. Kaganovich

deceive Comrade Stalin about motors? I'm afraid that even now some comrades did not do this.

Kulik: We follow the designers, what they give us, we take, and we must demand what we need ... Every designer is a feudal lord, he does what he wants. They have millions in their current account, but they don't want to work. Voroshilov: All aviation management has

been changed. New people have been appointed. The old ways of working are condemned. New people get to work well. With the help of the Central Committee of the All-Union Communist Party of Bolsheviks and Comrade Stalin, everyone was put on their feet ... We now have more cars than we need, and they cost at the level of the aircraft of the advanced capitalist countries. The problem now is to choose the best sample and put it into production. All this has been created, it is the result of a great work of the team. Government, the Central Committee and Comrade Stalin personally...

(112)

There really were "more than necessary" cars. In 1940, 45 aircraft were at the design and initial testing stage, and 13 of them reached state tests. There were plenty to choose from. We have already talked

about one of the selected projects above. Stalin fell in love with the plane, which was later called the MiG-3, passionately and immediately. General Zakharov recalls:

At a meeting held at the beginning of the forty-first year, Stalin spoke a lot about this fighter, about the need to master it as quickly as possible.

— I can't teach pilots to fly

these machines. You are mine

helpers. You must teach pilots. Love this car! It sounded like a personal request...

(55)



MiG-3

The production capacities of the country's largest aircraft plant (No. 1) were entirely given over to the MiG production program. The pace with which the new car went into production was unprecedented even for that crazy era.

At the beginning of December 1939, the I-200 project, together with the developers, was presented to the newborn Mikoyan Design Bureau, on December 25, 1939, the Air Force Commission reviewed and approved the aircraft layout, by February 10, 1940, working drawings were made, on March 4, 1940, the Decrees of the Council of People's Commissars were issued on the construction of three prototypes of the I-200 fighter. Finally, on April 5, the oldest test pilot A.N. Yekatorov (graduated from the Moscow Aviation School in 1916, 24 years of flying experience) raised the car for the first flight. The actual flight parameters were, of course, lower than expected, but still exceptionally high. Even with the AM-35 engine (there was no 37th engine yet), the aircraft developed a maximum speed of 628 km / h at an altitude of 7 km (in one of the flights, a speed of 651 km / h was achieved) and 579 km / h at an altitude of 2.2 km. The plane gained a height of 5 km in 5.1 minutes. (94) In all of the above parameters, the I-200 was superior to the Messerschmitt of the F series, which was being tested at the same time. It is worth noting that the I-200 tests were successful and, which is quite unusual, bloodless. Before the end of factory tests (August 25, 1940), the first copy of the I-200 completed 109 sorties with a total flying time of 40 hours 49 minutes without any significant accidents and loss of life. On September 13, 1940, at a meeting of the technical council of the Air Force Research Institute, it was noted that "The I-200 is the most advanced aircraft when it enters state tests." (94) The future of the fighter, renamed from "I-200" to "MiG", was not in doubt - the aircraft became the main product of the plant number 1, and the production plan for 1941 provided for the production of 3600 "MiGs".

It can be assumed that the mood of Comrade Yakovlev at that moment was not so rosy. Appointment to the post of Deputy People's Commissar did not add anything significant to his actual status of "a person close to the person of the Boss", but added a lot of trouble and completely

extra personal responsibility (and in this sense there is no reason not to believe Yakovlev that he resisted the "high appointment" as soon as he could). The ill-fated "BB-22" from plant No. 1 was taken out and sent to be "brought to mind" to a low-power plant No. 81 in Tushino. All the intricacies of intrigue against Polikarpov ended only with the fact that the next Polikarpov fighter (I-200), however, under the name MiG, again occupied the production facilities of the country's largest plant. The second largest fighter manufacturer, the Gorky Aircraft Plant No. 21, has so far successfully sabotaged the launch of the Polikarpov I-180, but Yakovlev himself did not personally receive anything from this. Conclusion? It was necessary urgently, "at any cost", to speed up the testing of our own I-26 fighter. So far, "the train has not finally left."

As the reader, of course, has already noticed, the author is very partial to Comrade Yakovlev personally and to his role in the development of Soviet military aviation. Therefore, we will replace the author's assessments with a lengthy quotation from a monograph dedicated to the fighters of the Yak-1/7/9 family.

"I-26" was designed in just five months. One day before the end of 1939, the graceful red monoplane was transported to Khodynka for factory testing ... The "record" time for designing the fighter immediately made itself felt. There were more than enough defects, blunders, inconsistencies. The main thing is that the strength of the aircraft turned out to be insufficient (67% of the breaking load) ... The chassis design turned out to be extremely unsuccessful. At speeds above 220 km / h, the landing gear was not retracted, when cleaning the wheels, they hit the wing skin with force ... The locks were unreliable, there was a constant danger of unintentional retraction or landing gear ... The tests of the I-26 were interrupted by tragedy - April 27, 1940. Yulian Ivanovich Piontkovsky, the chief pilot of the Yakovlev company, crashed on it. The exact cause of the crash could not be established. Probably, the landing gear spontaneously came out, the wheels began to sway and strike the wing. According to another version, the wing fell off the plane due to insufficient strength ... It is very likely that if Yakovlev had not been the deputy commissar of the aviation industry, the history of the fighter would have ended with factory tests. What is the fact that in his 42 flights Piontkovsky **15 times landed on an emergency landing (hereinafter, it is emphasized by me. - M.S.)**, so the catastrophe is a completely natural result. However, Yakovlev managed to convince Stalin of

the prospects of their offspring ... the Air Force Research Institute agreed to accept the I-26 for testing only because of unprecedented pressure from above. In the act of acceptance for state tests dated June 1, 1940, a whole "bouquet" of inconsistencies of the aircraft with the requirements of the terms of reference and **strength standards was noted.**

The testers were given a difficult task ... Climbing was carried out with maintaining horizontal platforms every two to three minutes (***clarification is needed here: imagine that marathon running is replaced by a daily run of 100 meters a day, and after a year and a half it will be "gained" the total length of the marathon distance, the running time of all the "hundred meters" add up and the runner is declared the world record holder.*** -

M.S.), the maximum speed measurements were carried out for three minutes instead of six. The reasons for such, so to speak, "tests" were engine overheating and insufficient strength ... According to the results of the Air Force Research Institute, it concluded that the I-26 fighter did not pass the **state test**, and the defective statement for the car

consisted of 123 points ... Formally, the I-26 » "did not finish" the tests, i.e., a number of flights were not carried out. However, everyone was well aware of what would happen to the machine and the pilot in the event of aerobatics or diving at high speeds.

(17)

Comments, as they say in such cases, are superfluous, but one clarification should be given, not of a technical, but of a human nature. Yu.I. Piontkovsky tested, and at his own peril and risk, even the very first planes of an unknown student Yakovlev. Piontkovsky was next to the designer for more than 10 years, was older than him by years, and to a large extent it was he who helped Yakovlev become what he became. In Yakovlev's book (86) there is not a word, not a half-word about the plane that fell apart in the air and the death of Piontkovsky. There was a man - and was not ...

Returning from a man to an aircraft that received the name Yak-1 in December 1940, some undoubted advantages of the new fighter should be noted. ***"The opinion of the combatant pilots practically coincided with the opinion of the test pilots: the simplicity of piloting and the ease of mastering the fighter were especially noted, complaints were caused by engine overheating, flaws in the design of the landing gear, lack of a radio station, generator, and landing lights."*** (17)

On the threshold of the Great War, a fighter aircraft that was easy to fly and accessible to an inexperienced pilot was very much needed by the Soviet Air Force. Moreover, the super-fast MiG turned out to be very difficult to pilot. An outstanding

Soviet pilot and commander, a veteran of the Spanish and all subsequent wars (he met the Great Patriotic War in the rank of Major General and the position of commander of the 43rd Fighter Division) G.N. Zakharov speaks very harshly about the MiG: ***“He did not forgive mistakes when piloting, he was designed for a good pilot. The average pilot on the MiG automatically passed into the category of the weak, and even the weak simply could not fly on it.*** (55) Yes, of course, other statements can be found. A.I. Pokryshkin, for example, writes about the MiG with enthusiasm (“at high altitude, the plane is God”), but a mass-produced aircraft for the largest aviation in the world could not be designed for the skills and abilities of Pokryshkin-level pilots. Alas, it remains to sigh fruitlessly once again that the Mikoyans did not consult with Polikarpov and stole the unfinished I-200 from him, instead of launching the magnificent I-185 under the name MiG, which combined and high speed, and powerful weapons (three ShVAK guns), and ease and simplicity in control ...

In terms of armament, the Yak, thanks to the installation of a cannon firing through the hollow propeller shaft, also outperformed the I-200 with its machine-gun (1 UBS + 2 ShKAS) weapons. In addition, the design of the "Yak" made it possible to increase the power of fire by installing a larger and larger caliber gun (by the end of the war, as you know, they reached 37 mm and even 45 mm). In a word, not only the presence of "administrative resources" can explain the hasty launch of the completely "raw" and still extremely dangerous for the pilot "Yak-1" into mass production (in May 1940, even before the start of state tests, which "I-26" so and could not successfully pass, it was decided to release it at once at three factories). However, these three "factories" (No. 301, 47, 292, they are also a furniture factory, repair shops and "Sarcombine"), taken together, did not cost one third of the Moscow aircraft giant No. 1. A.S.

Yakovlev understood this perfectly, so he started a cunning multi-way intrigue. This intrigue brings us back to the ancient Russian city on the Volga, which at that time was called Gorky. The management of plant number 21 until the autumn of 1940 stubbornly and successfully sabotaged all decisions of the party and government to deploy mass production of the I-180. While these amazing and incredible “undercover battles” were going on, the huge plant continued to “drive the plan” for the production of obsolete

"I-16". In parentheses, we note that, contrary to the repeatedly replicated conjectures, Polikarpov not only did not try to continue the production of the outdated I-16 indefinitely, but also asked in writing (alas, to no avail) the leadership of the NKAP to stop the production of the "donkey" or, at least, leaving in the series, only the latest "type 29", free up the capacity of the 21st plant for the "I-180". In the fall of 1940, the People's Commissariat "suddenly" drew attention to the abnormal situation that had developed in Gorky, and proposed transferring the production of MiG-3 fighters to plant No. 21. In this roundabout way, Yakovlev tried to free up the production capacities of plant No. 1 for the production of his fighter.

But it was not there. The Mikoyans were the first to oppose such an idea, rightly judging that the 33-year-old deputy people's commissar "takes it out of rank." Said his weighty word and the director of the plant number 1 P.V. Dementiev, who did not smile at the prospect of another restructuring of the entire technological chain for the production of the Yak-1, the design of which (a welded truss covered with fabric) had little in common with the MiG. And the word of Dementyev, the head of the largest aircraft plant in the country, who also has "his own man at the top" (Dementyev was the chief engineer of the director of the 1st plant, Voronin, who became Shakhurin's deputy in January 1940), was weighty. The project of transferring the production of MiGs to the Volga was buried in the bud.

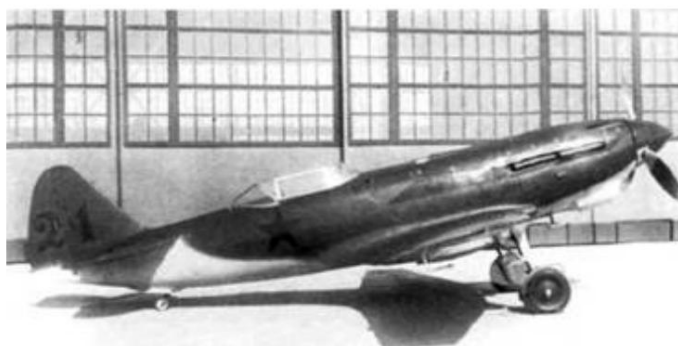
And what about plant number 21? And nothing new. Yakovlev with his "I-26" ("Yak-1") was also not allowed into the plant. The children's fairy tale ("I left my grandfather, I left my grandmother, I will leave you too ...") continued until the very end of 1940. Someone (something) saved the plant until ... Until the tests of the varnished "I-301" were completed with sin in half. It was he who was launched into a large series at the Gorky aircraft factory! The repeatedly mentioned above December plan for the production of combat aircraft for 1941 provided for the production of 2960 "LaGG-3" (a thousand more than the "Yakov"). And this despite the fact that plant number 21 has not even begun to master the complex, extremely low-tech wooden structure of the LaGG.

On New Year's Eve, 1941, the first group of designers from the Lavochkin Design Bureau arrived in Gorky. They were instructed for a long time on the subject that the aircraft plant is a secret enterprise, and its "closed" number 21 is top-secret information at all, therefore, from the station to the plant, one must move silently, along a route learned by heart. In a December snowstorm in an unfamiliar city, everyone immediately got lost. Just then, a tram covered in snow up to the very roof drove up, and the conductor shouted: "Who should go to the 21st plant? Get in quick!" Of course, no one moved from their place - it is better to freeze than to go on a provocation ...

Speaking seriously, the author failed to find at least some logic in the events at the 21st plant. One can understand why he did not go into the I-180 series: Polikarpov was in disgrace, and the blunt-nosed fighters with an air-cooled engine were carefully discredited by someone in the eyes of the Boss. Everything is clear here. But there were also quite "sharp-nosed" contenders for the largest aircraft factory. The most natural, convenient for the technologies of this plant (and perhaps the best of the entire group of new fighters with an M-105 liquid-cooled engine) was Pashinin's I-21 fighter. MM. Pashinin was one of the leading specialists of the

Polikarpov Design Bureau, and during the described period - the head of the design bureau division engaged in design support for the serial production of "donkeys" at plant No. 21 (hence the name of Pashinin's fighter "I-21").

If the I-180 was a deep modernization of the I-16 by installing a new M-88 two-row air-cooled engine, then the I-21 fighter was a deep modernization of the same I-16 by installing a liquid-cooled engine M-105. Thanks to this approach to design, 60-70% of the parts and assemblies of the new fighter were similar or directly identical to the parts of the I-16, which, in turn, promised the possibility of a rapid deployment of mass production of the I-21.



"I-21"

The main "highlight" of the "I-21" project was a wing with a special symmetrical, so-called "momentless" cross-sectional profile. The use of such a wing made it possible (in terms of strength) to develop tremendous speed in a dive - up to 950 km / h (although in reality, flying at such speeds already close to the speed of sound would be impossible due to the conditions for ensuring longitudinal stability). The very idea of achieving a high diving speed was absolutely relevant and corresponded to the general trend of the transition from combat maneuvering in turns to dynamic vertical maneuver. A rare advantage for the I-21 in 1940 was also a teardrop-shaped cockpit lantern,

providing all-round visibility. In a word, the plane was very, very outstanding. The I-21 made its

first flight in July 1940. The aircraft turned out to be light (take-off weight 2670 kg, i.e. lighter than the Yak, and even more so the LaGG), showed a speed of 573 km / h at an altitude of 5000 m and an unprecedented high rate of climb near the ground - 21 m / s. The first copy of the "I-21" crashed. In October, the second copy was built and began factory testing, and in April 1941, the third. There were many problems. Some of them were common to all new fighters born in 1940 - a frantic race with the start of flight tests and the extremely unsatisfactory performance of the still "raw" M-105 engine. Others (unacceptable landing speed of 165 km / h according to the Air Force requirements, insufficient stability in flight) were associated with the use of a new, little-studied wing profile. The plane, of course, required painstaking and lengthy refinement - but in this sense it was no different from its competitors. The main thing was that in the case of the "I-21" there was something to refine, the output of the process could be a front-line fighter, in some aspects superior to both the Polikarpov "I-180" and the Yakovlevsky "I-26". Nevertheless, the tests of the Pashinin fighter were stopped at the beginning of 1941, and in January 1941, the LaGG-3, an initially stillborn, heavy wooden piano, went into production. Alas, someone liked LaGG-3 very much. Later, three more aircraft

factories were transferred to its production: the 23rd in Leningrad, the 31st in Taganrog (later evacuated to Tbilisi) and the 153rd in Novosibirsk. In the plan for the 1st quarter of 1942, LaGG completely "breaks out" into first place (1570 LaGGs against 785 Yak-1s). Apparently, they forgot to stop the production of LaGG-3 even after it was radically converted into La-5 in the spring of 1942 in Gorky. Plant No. 31 in Tbilisi continued to produce the "lacquered coffin", already hopelessly outdated by that time, throughout 1943, and even in 1944 transferred another 432 "LaGGs" to the Air Force! How it was possible in the 44th year to fight on the "LaGG" against the "Messers" of the K series (an engine with an afterburner power of 2030 l / s.), Only the authorities knew.

Be that as it may, at the end of 1940, three "new types" fighters ("MiG", "LaGG", "Yak") were already in mass production (or on the nearest approaches to it), and the Air Force command was already drawing up calendar plans rearmament of fighter regiments. Finita la comedy? No, the "comedy", but in fact - a tragedy with great loss of life, was just beginning. The attentive reader may remember that at the beginning of the 14th chapter we mentioned a festive dinner,

which took place to be eaten at Stalin's dacha on November 7, 1940. So, at that very dinner, Comrade Stalin not only advised his associates to engage in self-education, not only reminded them that he might get angry. Comrade Stalin shared with those present the new knowledge that he had learned in the process of self-education:

... It turned out that our planes can only stay up to 35 minutes in the air, while German and English ones can stay in the air for several hours! Meanwhile, no one from the military department signaled about the aircraft. None of you have thought about it. I called our designers and asked them: is it possible to make our planes stay in the air longer? They answered: It is possible, but no one gave us such a task! And now this shortcoming is corrected ...

(105)

Where these figures came from is unknown. And it is completely incomprehensible - what kind of "German and British aircraft capable of staying in the air for several hours" are we talking about. The Soviet bomber "DB-3f" ("Il-4") had a greater flight range than the serial bombers of England and Germany in 1940, and "stayed in the air" for 10-12 hours. But, judging by the context, Comrade Stalin was talking about fighter planes. The German "Messerschmitt-109" and the English "Spitfire" had almost the same takeoff weight, almost the same volume of fuel tanks (400 and 386 liters, respectively) and could hold out in the air (when loitering at cruising speed, without combat maneuvering!) No more than 1, 5–2 hours. Almost all authors note that during the "Battle of Britain" the German "Messers", taking off from airfields in northern France, were forced to leave the battle after 20-25 minutes. Even a very light (about one and a half times lighter than the Bf-109E) I-16 fighter had a maximum flight range of about 450 km, which gives at least 1.5

hours of barrage. Already in April 1939, work began on the installation of external fuel tanks. Their first combat use was in the Finnish war. After many experiments, they settled on the design of a

93-liter fiber (cardboard) fuel tank. Two of these tanks were hung under the wings of the "donkey", increasing the duration of the patrol by another hour. At the beginning of 1940 from experiments

switched to serial production, and each "I-16" was equipped with six (!) Hanging tanks. (32) As for the "new types" fighters, they all had a maximum flight range (without any external tanks) of the order of 600–700 km, i.e., they were in no way inferior in this respect to their Anglo-German competitors. In any case, there were no grounds for panic statements that the duration of the flight of Soviet fighters was several times shorter. But even this is not the most important thing. An extremely important and almost unexplored question is

why, at the turn of the 1930s and 1940s, Comrade Stalin suddenly needed combat aircraft with an unusually long flight range. Even a cursory glance at a geographical map (or a school globe) is enough to notice the difference in the size of Germany and the USSR. It was Hitler who should have had a "headache" about which fighters would accompany the non-existent long-range bombers in raids on the Soviet aircraft engine plants in Rybinsk and Perm. Nevertheless, Hitler started the World War and fought for two years with bombers with a combat range of no more than 2700 km (He-111), a heavy (6740 kg) twin-engine fighter Messerschmitt-110 with a maximum range of 909 km and the main front-line fighter "Messerschmitt-109" with a range of less than 700 km. For some reason, Stalin needed completely different numbers. Already having the DB-3f bomber in serial production and in service with combat units, capable of flying 3,300 km with a

bomb load of 1 ton, in January 1939 (i.e., even before the start of the world war), he set the task of creating a bomber with a range 5000 km. In accordance with these requirements, the twin-engine bomber DB-240 (Er-2) was developed and put into mass production.

Later, October 2, 1940. By a resolution of the Council of People's Commissars and the Central Committee (and the order of the NKAP No. 521 issued on its basis), it was decided to increase the flight range of all fighters introduced into mass production. For twin-engine escort fighters - at least 2000 km, and even for single-engine vehicles a range of 1000 km was set. Moreover, the indicated ranges had to be provided without the use of hanging tanks! Until very recently,

Russian historians attributed these decisions to the category of inexplicable eccentricities of the generally sensible comrade Stalin. But the documents found in the archives (RGVA, RGAVMF, RGASPI) and first introduced into scientific circulation by A. Stepanov testify that studying the history of the so-called "pre-war

period" without a globe is simply impossible. It turns out that already in April-May 1940, the command of the Air Force and Aviation of the Navy was actively developing plans for bombing Beirut and Haifa, Cyprus and Malta. Particular attention, of course, was riveted to the planning of the operation to bomb the Suez Canal, with the aim of ***"depriving England and the Mediterranean states of the possibility of normal operation of this communication."*** Moreover, the Soviet military attache in Berlin was given the task of requesting from the German allies all available information on the air bases of the Royal Air Force in the Mosul region ... The Decree of October 2 actually crossed out the enormous

work on the design of a new generation of fighters. Even increasing the range "simply" by installing external fuel tanks required a significant redesign (primarily strengthening the landing gear and wings) and would inevitably lead to a decrease in all flight characteristics due to the increased aerodynamic drag and aircraft weight. It is impossible to deceive the law of nature, expressed in the "equation of existence". The addition of 200-300 kg of fuel (while maintaining the original thrust-to-weight ratio and specific wing load) would lead to an increase in take-off weight by at least one ton, which would require the use (in fact, development) of an engine with a unit power of about 1500 hp. But Comrade Stalin wanted to put all the extra fuel inside the plane! This created an almost hopeless situation. There is a lot of free space in a single-engine fighter. The question is, where is it? The tail section of the fuselage is empty, like a drum, but placing an additional mass of fuel there will lead to a shift in the

center of mass back, a decrease, and in the worst case, a complete loss of longitudinal stability. Loss of longitudinal stability is an immediate exit to supercritical angles of attack and the aircraft stalls into a tailspin. This option is not suitable, but it was he who was implemented on the MiG. According to the memoirs of one of the developers of the "I-200" N.Z. Matyuk, on one of the October days of 1940, the director of plant No. 1 Dementyev entered the design bureau hall.

If you don't suggest how to bring the speed range of the I-200 up to 1000 km, then the car can be removed from mass production," Dementiev turned to us without further ado. When is this decision required? someone asked. "Tomorrow morning," the director replied.

After that, Pyotr Vasilievich politely said goodbye to everyone and came out...

Further, the author of the memoirs writes that “by ***the morning it was possible to “push” an unusually shaped gas tank into the fuselage under the cockpit by small movements of the water radiator and the units of the aircraft control system.***” Anyone who has seen a plane at least once in a section should understand how many changes need to be made to hundreds and even thousands of drawings in order to realize a “small movement of the radiator” in metal, to push a 250-liter gas tank under and behind the pilot's seat, etc. e. To restore the broken alignment, the motor had to be moved forward by 100 mm, and all this was done in a fantastically short time. As a result, the weight of the fighter (the variant with an

additional gas tank was called the "MiG-3") increased and reached 3355 kg, the rate of climb fell from a record (5 km in 5.1 minutes) to very mediocre (5 km in 6.5 minutes). Due to the increased load on the wing, the landing speed rose to 145 km / h (125 km / h for the Messer, 130 km / h for the I-16 of the latest types). The only “trump card” of the MiG was its high speed (495 km / h at the ground, 640 km / h at an altitude of 7 km), in this parameter it was not inferior yet, but at high altitude it surpassed the Messerschmitt of the latest modification F -2. It is not quite clear what the consequences of the violation of the initial alignment of the aircraft are. Tests at the Air Force Research Institute seemed to confirm the sufficient longitudinal stability of the MiG-3. On the other hand, it was after the installation of the rear gas tank that a long series of MiG disasters began due to a breakdown in a tailspin. However, this could also be due to the beginning of the development of the capricious MiG by pilots of combat units, who did not have such qualifications as the testers of the Air Force Research Institute.

Misfortune never comes alone. Began mass cases of engine failure AM 35A. The engine stalls both at high altitudes and at low altitudes - especially when trying to give a "sharp gas". Suffice it to say that during factory tests on three experimental I-200 aircraft, the failed AM-35A engines had to be changed 7 times. On March 12, 1941, test pilot A.N. died during the tests of the MiG-3. Ekaton (the one who first took the I-200 into the sky), and before him, in the same 1941, two more MiG testers died: Kuleshov and Afanasyev. A wave of catastrophes also swept through the combat units. Things got to the point that in the second half of March 1941, all flights of aircraft (serial and experimental) with AM-35A and AM-37 engines were banned.

The cause of the engine failure was the insufficient strength of the blower impeller and the unreliable design of the blower inlet guide vane control mechanism. The question of these ill-fated guide vanes was discussed at the level of the Politburo of the Central Committee - of course, because hundreds of the latest fighters froze like shot birds on military airfields. A group of designers in the truest sense of the word was locked up in the design bureau with orders to develop a new mechanical blade drive. Developed. We tried it. Happened. On an emergency basis, new mechanisms were sent to fighter regiments. Cases of engine shutdown during abrupt operation of the gas sector almost ceased, but the engine still worked extremely unreliably: it warmed up, "driven oil", spark plugs had to be changed every 5-6 sorties ... And what about the 1000-km range? First of all, it should be noted that the ill-fated Decree of the

Council of People's Commissars of October 2 required such a range to be provided at a speed corresponding to 90% of the maximum. This is a very important clarification, since the most favorable speed in terms of fuel consumption was lower and amounted to about 65–80% of the maximum for an aircraft of that era.

Let's explain this with a concrete example. Tests of the serial MiG-3, carried out after the start of the war, showed that the duration of the flight at a speed of 90% of the maximum was 1 hour 10 minutes, and at the optimal fuel consumption altitude and speed - 2 hours 11 minutes. There is not the slightest doubt that both the "round" figure of 1000 km and the equally "round" 90% came to Stalin's head without any reasonable, technical or tactical justification. Desperate attempts to get a speed range of 1000 km on the MiG continued throughout February, March, and April. With a maximum load of 470 kg of fuel, this was sometimes possible. More often than not. Between the leadership of the NKAP and the military testers from the Air Force Research Institute, conflicts began, mutual reproaches for the wrong method of testing, improper operation of the engine, etc. In the atmosphere of general hysteria created under the leadership of the party and personally Comrade Stalin, the term "wrong" was easily replaced by the word "wrecking". This time, the consequences were incredibly devastating, but more on that later. Design Bureau Lavochkin went the other way. Additional fuel tanks

were placed in the wing. This made it possible to maintain the original centering and

longitudinal stability. However, "LaGG" was already prone to falling into a tailspin (moreover, a sudden breakdown), and with a reduced margin of stability, it would

just couldn't fly. The increase in the already excessive take-off weight, the lack of "furniture" polishing, combined with the manufacturing defects inevitable during ultra-high-speed launch into mass production, led to the fact that the maximum speed of the serial LaGG-3 dropped to 549 km / h. But this is not the main result of the struggle for range.

Wing tanks are a significant increase in the area of aircraft vulnerable areas. It is no coincidence that N.N. Polikarpov and V. Messerschmitt made their fighters with one gas tank in the fuselage. One, even a large tank, had a much smaller area of destruction, and it was easier to cover it with something (armor or engine). As a result, on top of all the shortcomings of the LaGG, it also turned into what the American pilots called "one shoot lighter" (this can be translated as "failsafe lighter"). However, in this it differed little from the Yakovlev fighter, in which all the fuel was placed in four wing tanks. Protecting gas tanks to some extent mitigated the problem of the vulnerability of wing tanks, but no protector could close a hole of 200-300 mm formed by a 20-mm shell of an enemy air gun ...

How did the Yakovlev Design Bureau solve the problem of "distant wanderings"? But no way. Deputy People's Commissar Yakovlev simply ignored the order of the NKAP No. 521. There were no improvements (i.e., no damage) to the I-26 fighter (the future Yak-1) to increase the range to 1000 km, and all tests and measurements of flight characteristics produced with a fuel weight of 305 kg. Up to their withdrawal from production in 1944, the Yak-1 and Yak-7 aircraft were produced - and successfully accepted by military acceptance - with a flight range of 650 km. The fact is very interesting, forcing us to take a fresh look at the origin of Order No. 521 itself ...

As for the long-range bomber "Er-2", the whole ridiculous history of its development can serve as an example of the wisdom of the folk saying: ***"To be born quickly, then to be born stupidly."*** The beginning of the story was extremely typical for that era. The chief designer (Italian aristocrat R. Bartini, who of his own free will came to help the country of the "victorious proletariat") was arrested and works in the OTB "sharashka". The design bureau is headed by a young party organizer of the enterprise, a graduate of the Mechanics and Mathematics Department of Moscow State University V. Ermolaev. The aircraft was designed and built in an incredibly short time: on July 29, 1939, the terms of reference were approved by the Decree of the Defense Committee under the Council of People's Commissars of the USSR No. 227, and already on May 14, 1940, the first flight of the new bomber took place! On October 17, 1940, state tests were completed at the Air Force Research Institute, as a result of which it was established that not a single requirement of the terms of referen

at least Er-2 is put into mass production at aircraft plant No. 18 in Voronezh, whose team quickly masters a new (and very different in design from the DB-3f that was previously produced by plant No. 8) machine.



"Er-2"

Further - more. On April 12, 1941, the people's commissar of the aviation industry, Shakhurin, signed order No. 330, according to which the production of the "good old" DB-3f was completely stopped, and it was proposed to concentrate all the forces of the plant on the assembly of the Il-2 and Er-2 aircraft . "" . True, a month after the issuance of this order, on May 16, 1941, Major General Zharov, head of armament orders for the Red Army Air Force, reported:

According to the acts of ground acceptance on May 14, 1941, it was accepted military representative of 13 Yer-2 aircraft.

Not a single aircraft can be sent to combat units at this time, since the factory is delaying their refinement. The difficulty in fine-tuning these machines is the exceptionally careless and hasty assembly of aircraft ...

(105)

In the end, after the start of the war, two air regiments were armed with Yer-2 aircraft: the 420th DBAP and the 421st DBAP. As of August 4, 1941, there were 32 in the 420th regiment, and 28 in the 421st, for a total of 60 brand new, only from the factory, "new type" bombers.

The first combat operation began on 10 August. By this time, in the 421st DBAP alone, there were 30 (thirty) cases of rupture of the landing gear hydraulic system. One aircraft, two days after entering the regiment, crashed along with the entire crew, going into a steep dive for an unknown reason. 6 aircraft burned in the air due to spontaneous combustion of engines. All the rest would have burned down if the urgently created commissions had not revealed the following picture: - the connector of the supply pipeline of the gasoline system is located next to exhaust manifold of the engine (design flaw);

- the connector itself was assembled at factory No. 18 (and this is one of the four most powerful factories in the country!) So that gasoline does not even leak from

it, but spurts out (factory marriage); - in addition, a wrench flew over the supercharger of one of the motors. On August 10, 28 combat-ready Yer-2s flew to the Pushkino airfield near Leningrad to participate in the most important operation, which was personally led by the commander-in-chief of the Air Force Zhigarev, to carry out a massive raid on Berlin. After a strict "input control" of the technical condition of the aircraft, only 16 Yer-2s were recognized as serviceable. Out of 28, although it would be more correct to say - out of 60 delivered from the factory in terms of DBA. The evaluation of the Yerov by the pilots can be judged from the report of the commissar of the 420th DBAP, senior political instructor Dokalenko: **"... The flight crew expresses a certain mood regarding the reliability of the materiel. Pilots and navigators**

say that it would be good to transfer them to another type of aviation ... " (36) Soon, the leadership of the Air Force lost interest in the ultra-long bomber. The Ermolaev Design Bureau is transferred from factory to factory, they try to "bring it to perfection" for four years in a row, changing one type of engine after another (two M-105s, of course, were absolutely insufficient for an aircraft whose weight was twice the weight of the Ar-2 " or "Pe-2", all other engines worked extremely unreliably). During one of these transfers-flights V.G. Ermolaev fell ill with pneumonia and died untimely on December 31, 1944. By the end of the war, after getting acquainted with the American bombers, work on the Yer-2 was stopped. During the entire war, about two hundred Yer-2s were transferred to combat units of long-range aviation. This aircraft did not play any significant role in the war. The main thing that remained of it for many years is the beautiful, openwork steel trusses of the center section. The authorities of the city of Irkutsk used them on the fence of the Palace of Culture of the same plant, where

hungry workers cooked these ill-fated farms for 12 hours a shift ... In pursuit of an unheard of distance (twice, by the way, twice the distance from Minsk to Berlin and back) "SNK and the Central Committee "in the person of Comrade Stalin, they did not immediately notice the magnificent front-line bomber Tupolev ("ANT-58", "product 103"), surpassing all world standards. When they came to their senses, all the main aircraft factories capable of mass production of a twin-engine all-metal aircraft were already busy. What are busy? They are engaged in the production of the "semi-bomber" "Pe-2" (Moscow plants No. 22 and 39, Kazan No. 124) and the "distant" stillborn "Er-2" (Voronezh plant No. 18). Nevertheless - and this is very important to note - th

serial production was nevertheless accepted. On June 17, 1941, the order of the NKAP No. 533 was issued signed by Shakhurin:

In pursuance of the government decree ... the director of plant No. 18, Comrade Shenkman, immediately begin preparations for putting the 103 aircraft into production.

... To the director of plant No. 156 Comrade. Lyapidevsky, together with the head of the NKVD OTB comrade Kravchenko, develop serial drawings for transfer to plant No. 18 in the period from August 15 to September 15, 1941 ... send to plant No. 18 no later than October 15, 1941 a group of specialists from the NKVD OTB in the amount of 20–25 a man led by Comrade Tupolev ...

It is noteworthy that in order No. 533, next to the name of the exposed and still in custody "enemy of the people" Tupolev is the appeal "comrade." Speaking seriously, this order posed a completely unsolvable task for Plant No. 18: to arrange the production of three (!!!) new aircraft at once, and very different in design. If the ANT-58 was, so to speak, an "ordinary" riveted duralumin aircraft, then the Er-2 design had a lot of welded steel components and assemblies, but the armored Il-2 was completely perfect. exclusive." No matter how gigantic the 18th plant was, it could not overpower three new machines at once. There should have been only one plane left.

Exactly five days after the decision was made to deploy the mass production of ANT-58, the war began. Five days later, it became quite clear that long-range raids on Haifa, Alexandria and Malta would have to wait. The Soviet Air Force faced completely different tasks, and there was no better front-line bomber than the ANT-58 in the world. It would seem that the choice is obvious. Nevertheless, the long-range Er-2 and the Il-2 attack aircraft were left at plant No. 18, but the ANT-58 (the future Tu-2), together with the design team, went to places not so remote. in the city of Omsk.

On July 27, 1941, a decision was made by the State Defense Committee, according to which the prison TsKB-29, Moscow aircraft factories No. 156 and 81 were evacuated to Omsk, to the production site of an unfinished car assembly plant. On this basis, a new aircraft plant No. 166 was to be created. This non-existent plant was supposed to (as soon as possible, of course) launch the production of the 103 (Tu-2) bomber.

In fact, such a decision meant curtailing the program to create a new front-line bomber. modern enough

the complex design of a 10-ton twin-engine aircraft, saturated with mechanization, would have been within the power of a powerful aircraft factory, but certainly not a newborn, which had neither buildings nor equipment, "factory No. 166". If there was any logic in all this (it might not have been, in July 1941, in an atmosphere of growing chaos and collapse, not such decisions were made), then it consisted in the fact that the Tupolev Design Bureau became "ownerless" and pushed there was simply no one to release the Tu-2 program.

"Freedom comes naked." It seems that this is exactly what happened with the unique aircraft and the engineering team that created it. At the end of July 1941, TsKB-29 ("sharashka" of the NKVD) was officially liquidated. More precisely, the leadership of the NKVD liquidated the design bureau within its structure. Which, of course, is logical and natural. But the valiant Chekists were in no hurry to release (not to mention apologize to the innocent people who suffered) the designers. The theater of wild absurdity continued for several more years! On July 21, 1941, A.N. was released. Tupolev. All the other "zeks" went to Omsk, as it should be, under escort. In Omsk, the "special contingent" was settled in a two-story brick house, surrounded by a blank fence, with barred windows. The "criminals" were taken to work (to draw drawings marked "secret" and "Soviet secret") on an ordinary city tram, but under escort. The escorts, of course, were listed in the dangerous and difficult Chekist service, received military orders, and those who survived today are considered veterans of the Great Patriotic War ... The first group of specialists (about 20 people in total) was released on

August 9, 1941. Finally, the "special prison of the UNKVD in the Omsk region" was liquidated only on September 30, 1943. The liquidation of the prison, again, did not mean the release of all prisoners. Already something, but there were enough prisons and prison-design "sharashkas" in Stalin's empire. For SP. The Kazan queen was found, for R.L. Bartini - Taganrog recently liberated from the Nazi invaders. Surprisingly different. Deprived of any support "at the top", Tupolev's team simultaneously built a plant, reworked "project 103" for the installation of M-82 air-cooled engines (the same ones that were saved by the courage of the chief designer and secretary of the regional committee), set up production and testing of the aircraft. And what is most surprising - built, adjusted and tested! The first flight of the lead aircraft "103V" with M-82 engines took place on December 15, 1941. The first serial aircraft

was produced at the end of February 1942. In the autumn of 1942, military trials began on the Kalinin Front, two air regiments were armed with Tu-2 aircraft: the 132nd OBAP

and 12th BAP. Front-line pilots left rave reviews about the new machine, which - unlike the "pawn" - was capable of taking large-caliber bombs, up to and including the FAB-1000, and, moreover, turned out to be practically invulnerable to the "Messers" (during military tests, no one "Tu-2" was not shot down by enemy fighters!). And then, when plant No. 166 became a really operating aircraft plant,

issued an order of the NKAP No. 763 dated October 10, 1942:

In pursuance of the decision of the State Defense Committee, in order to increase the production of fighter aircraft, I order: a) to stop the production of Tu-2 aircraft at plant No. 166. Keep the equipment, fixtures and technical documentation for the Tu-2 aircraft available at the plant in full;

b) put the production of Yak-9 aircraft at plant No. 166 ...

Orders are not discussed. At war. After the war, it is not a sin to think - was it worth destroying the best bomber "in order to increase the production of fighter aircraft" by Yakovlev? Especially in the year 1942, in which, as the attentive reader, ~~production~~ ^{established} remembers, Stalin gave very same order No. 0496, in which he demanded "be sure to use fighters to solve bombing tasks during the day on the battlefield." Comrade Stalin gave such orders not from a good life. Bombers were sorely lacking. In 1942, the following were produced: (2) - 858 DB-3f bombers; - 2524 Pe-2 light bombers; - 9918 fighters, including 5966 Yakovlev fighters. There were no such absurd proportions between the production of fighters and bombers in any of the leading aviation powers in the world. So, for example, in 1941-1942. the production of

bombers in Germany (not even counting the dive "Ju-87") amounted to half of the total production of combat aircraft. Shakhurin writes in his memoirs that Stalin later admitted his decision to stop the production of the Tu-2 was wrong. Moreover, he even slightly scolded Shakhurin for not complaining about Stalin to the Central Committee. The advice is good. But belated. The last person to complain about Stalin to the Central Committee was Lenin, but his complaint (the famous dying "letter to the congress") had no effect ...

Chapter

17 FATAL WORKS

Remember, dear reader, Nekrasov's poem "Railway"?

Listen, my dear: the fateful works are over
- the German is already laying the rails.
The dead are buried in the ground...

They say that great poets are endowed with the gift of prophecy. Whoever and no matter how today relates to Nekrasov's work, it should be recognized that by the winter of 1941 only one line was fulfilled: the "German" really diligently laid the rails, "altering" the wide Russian gauge to fit the size of the wheel sets of German cars. Everything else did not come true: the bodies of hundreds of thousands of the dead were thrown onto the battlefield, and the "fatal works" to create huge mountains of weapons, which began during the years of the second five-year plan, not only did not end, but, by and large, were just beginning. And although consideration of the course and result of these works greatly takes us beyond the time frame of this book, without understanding these results it is impossible to evaluate everything done by the "party and government" with the domestic aircraft industry in 1939-1941. The colossal scope of work on

the creation of new aircraft and new design bureaus culminated (not counting an even larger number of experimental machines) by launching into mass production the following

aircraft types:

a) MiG-3, LaGT-3, Yak-1 fighters; b) Su-2, Yak-2/4, Pe-2, Yer-2, ANT-58 bombers; c) Il-2 attack aircraft. And what was left of all this

diversity by the winter of 1941-1942? Let's start from the end of the list, because the history of the production of "IL-2" extremely strongly influenced the fate of all the other participants in the Great Races. Stalin liked the Il-2 (although at one time, in front of Ilyushin, he defiantly threw his application into the trash with a request to release him from administrative work and allow him to concentrate on what Ilyushin knew how to design aircraft). The armored attack aircraft actually turned out to be a very successful and necessary vehicle (although it was neither a "flying tank" nor an air

tank destroyer - see Chapter 5). I don't know how it is now, but in those distant years, when the author of this book was doing an internship at plant No. 18, which became the Kuibyshev aircraft plant, there hung a memorial plaque with the text of Stalin's famous telegram: "You let our country and our Red Army down . ***You still do not deign to produce "IL-2". The IL-2 planes are now needed by our Red Army like air, like bread. Shenkman*** (factory No. 18) ***produces one Il-2 a day, and Tretyakov*** (factory No. 1) ***produces one or two MiG-3s. This is a mockery of the country, the Red Army ... I ask you not to take the government out of patience, I demand that more IIs be produced. I warn you for the last time.***" A few lines, written in the frenzy of

December 1941, crossed out the program of the MiG-3 fighter. All the labors, all the intrigues, all the sacrifices of test pilots - everything went to dust. Three huge plants: Moscow aviation No. 1, Voronezh aviation No. 18, Moscow aircraft engine No. 24, evacuated to Kuibyshev in the fall of 1941, turned into a huge production complex for the production of Ilov. After the Stalinist telegram, the production of the MiG-3 at plant No. 1 was immediately curtailed, and it was not resumed anywhere else, since the engine plant No. 24 also curtailed the production of AM-35/37 engines and the low-altitude AM-38, barely keeping up with the colossal production of attack aircraft (8229 Il-2s were commissioned in 1942, 11193 in 1943, in total 35,668 Ilovs were produced during the war, which is an absolute world record for the production of a combat aircraft one type).

The next (after the MiG) "victim" of the Il-2 attack aircraft was the Yer-2 bomber. If this stillborn project could somehow be brought back to life, then only by installing powerful high-altitude motors. Those at that time were only the Mikulin AM-37. After the curtailment of their production at the 24th plant, the fate of the Er-2 was finally decided. Light bombers "Su-2" and "Yak-4", with their scanty bomb

armament, weak defensive armament and almost zero armor, unable to perform the work of a low-altitude "battlefield aircraft" or a full-fledged bomber, were ("Yak" - even before the start of the war, and "Su" - a year later) were taken out of production and out of service with the Red Army Air Force.

The program for the production of the magnificent ANT-58 bomber (103, Tu-2) was ruined: firstly, by the intrigues of competing clans, and secondly, by the lack of an engine (all the same AM-37). As mentioned above, the Tupolev Design Bureau in an extremely short time developed a version of the "aircraft 103" with air-cooled M-82 engines, but

the huge work on the construction, factory, and then military tests of the Tu-2 was at the end of 1942 brought to naught by the intrigues of A.S. Yakovlev, who successfully "captured" one aircraft factory after another at that moment.

What, as a result of all the efforts, remained in the "dry residue"? One single "semi-bomber" "Pe-2", with a short range and bomb load at the level of single-seat single-engine fighter bombers ("Kittyhawk", "Focke-Wulf-190"). Attack aircraft and "pawns" with greater or lesser success could solve tactical tasks to destroy enemy targets on the front line and in the near rear of his defense. This is important, but the tasks of bomber aviation are by no means exhausted by this. Not a single full-fledged medium front-line bomber was in production at all!

This situation - completely unthinkable in a country that has been preparing for a large-scale war for many years - forced the resumption of production of the DB-3f. This bomber - excellent for the late 30s and already out of production in April 1941 - was riveted in the distant Komsomolsk-on-Amur right up to the very end of the war (858 aircraft were produced in the 42nd year, 1586 - in the 43rd year, 706 - in the 44th year, 485 - until the Victory Day in the 45th). Of course, neither in quantity nor in quality, the production of such more and more obsolete low-speed "bomber carriers" could not provide the task of equipping operational bomber aircraft. The deliveries of the American twin-engine bombers A-20 "Boston" and B-25 "Mitchell" (in total, 2771 and 861 aircraft were received, respectively) somewhat improved the situation in the so-called "long-range aviation" (although the "long-range" action of these air regiments is beyond rare exceptions - and there was no question), but large batches of American bombers began to arrive only in the 43rd - 44th years. As they say, "to the cap analysis."

The study of the consequences of such a "distortion" in the development of strike aviation requires a separate, serious study. In the meantime, we note only one fact, which lies, as they say, "on the surface." In 1942-1943, the Wehrmacht fought on a front thousands of kilometers away from factories in Germany. And if "eggs and milk" could still be taken away from the defenseless population of the occupied regions of the USSR, then it was impossible to find cartridges, shells, mines (and high-octane aviation gasoline, too) on collective farms. All this had to be carried in thousands of echelons by rail from Bavaria and Saxony to the Don and Terek. And the rivers in the west of the Soviet Union flow absolutely "correctly" from the point of view of the country's defense - in the meridian direction, from north to south. Or from south to north, which in this case is not important. The important thing is that every projectile and every bullet,

fired at Soviet troops were transported across one of about a dozen large railway bridges across the Bug, Dnieper, Dniester, Neman, Dvina. How would the combat effectiveness of the Wehrmacht be affected by the systematic and continuous destruction of these dozen bridges by air strikes? Alas, this question has not been practically tested. A thousand attack aircraft, almost monthly arriving at the front, inflicted direct and obvious damage to the Wehrmacht (visible through the eyes of any commander). Did anyone at the high headquarters consider the expediency of redistributing part of the resources and production capacities from the production of Il-2 and Pe-2 to the creation of full-fledged medium and long-range aviation? Everything we know about the mechanism and procedure for making decisions in the "party and government" allows us to give only a negative answer to this question.

Has anyone calculated the comparative effectiveness of dropping explosives in the form of aerial bombs and supplying partisans behind enemy lines with the same explosives? According to the calculations of the chief saboteur of the Red Army I.G. Starinov, for all the years of the war, the partisans used up a little more than 1 thousand tons of explosives, which amounted to only 1% of the total mass of air bombs dropped on railways behind enemy lines. At the same time, the damage (destruction of railways and bridges, destruction of rolling stock and cargo) from sabotage was ten times higher than the damage inflicted on the enemy as a result of air bombardments of transport routes. (116, p. 199) Such an irrational use of a resource that is extremely scarce in a war - explosives and sorties - is explained (along with all other reasons for the lack of a well-thought-out concept of waging a sabotage war) and the absence of a full-fledged bomber, on the basis of which only operational military transport aircraft. Polikarpov's Po-2 "maize plant", with its carrying capacity of two boxes of grenades, could not, of course, solve the problem of supplying partisans deep behind enemy lines ...

Bomber aviation was a complete failure. With the fighter - at first glance - the situation is much better. At the very least, the volume of fighter production was huge: from the beginning of 1941 to May 1945, the Soviet aviation industry produced 54,606 aircraft. More than half (58%) of the total number were Yakovlev fighters ("Yak-1\7\9\3"). And judging by the way events unfolded in 1941-42, Yakovlev could even become the monopoly "king of fighters." The MiG-3 was taken out of production at the end of 1941.

As a "blank" for the development of a full-fledged front-line fighter, the MiG was no better and no worse than the Yakovlev aircraft. But - fell under the hot hand (telegram) of the Owner, was left without a motor and without a manufacturer and ended there.

The choice between "Yak" and "LaGG" was beyond doubt. There was no reason to spend an aircraft engine, which was scarce in the war, plus an equally scarce aircraft gun, for the production of a no longer varnished "coffin", if the same engine and gun could be sent to a factory producing the Yak-1 / Yak-7. Unfortunately, not everyone understood this right away, and during 1941 the production of LaGGs was almost twice the production of Yakovs (2463 and 1354 cars, respectively). Therefore, with all personal likes and dislikes, one cannot but admit that, in seeking to curtail the production of LaGGs, Yakovlev acted in a direction that completely coincided with the state interest. At the same time, however, the question of what exactly, what other fighter to put in the series remained open.

There were options. Despite all the dramatic events of the pre-war years, despite the "withdrawal" of the best personnel and the constant forced transfers from factory to factory, the Polikarpov Design Bureau still existed, and the development of the I-185 fighter continued. The next move - the evacuation from Moscow in October 1941 - threw Polikarpov to Novosibirsk, but not to the plant number 153 (which would be quite logical), but to the premises of the city menagerie. For flight tests, the former aeroclub airfield was provided. Even under such conditions, factory flight tests, and then state tests of the I-185 with M-71 and M-82 air-cooled engines, were successfully completed on March 28, 1942. It was on the basis of the results of these tests that the Air Force Research

Institute compiled the report with which we began (see Chapter 13) the story of the brilliant designer and the rat kings. Namely: ***"In terms of its flight characteristics, the I-185 is superior to all existing domestic serial and foreign aircraft. In terms of piloting technique and take-off and landing properties, the aircraft is simple and accessible to pilots of average and below average qualifications."*** But Yakovlev, who enjoyed the Master's great confidence at that moment, firmly stood his ground.

At the beginning of January 1942, the State Defense Committee issued a decision ordering to stop the production of LaGG-3 at plant No. 153 in Novosibirsk. However, it was not the fighter of the Polikarpov Design Bureau, which was nearby, in the neighboring menagerie, that was launched into the series, but the Yak-7 fighter. At the same time, Yakovlev made an attempt to take over the production of his aircraft and the huge plant number 21 in Gorky, but Shakhurin (according to his memoirs) opposed such a step. As a result, the decision to launch "Yakov" in the series

at the Gorky plant was not canceled, but was temporarily postponed for two to three

months. Further tragicomic incidents, which by a lucky chance ended with the birth of the La-5 fighter, have been repeatedly described in historical and memoir literature. (98, 109, 113) Let us briefly recall the main outline of events. Lavochkin pinned his main hopes on the new in-line liquid-cooled engine M-107. With the same dimensions as the serial M-105, the new engine of V. Klimov (nee the French Hispano-Suiza) developed a take-off power of 1400 hp. s, nominal - 1300 hp at an altitude of 5 km. True, he weighed 160 kg more, but an increase in power by 30% theoretically made it possible to "pull out" the flight characteristics of the LaGG to the level of war requirements. In the meantime, two copies of the M-82 air-cooled engine arrived in Gorky from Perm on a transport "Li-2", and even accompanied by the deputy chief designer of the engine plant V.I. Valedinsky.

There was no time to examine the drawings, and the new engine was brought in its most natural form by a gantry crane to the fuselage of one of the serial LaGG-3s. The round "star" of air cooling, of course, did not fit into the contours of the narrow fuselage of the aircraft, designed for an in-line engine. Further events as presented by Deputy Lavochkin S.M. Alekseev happened like this:

All the heads of workshops, several designers, the chief engineer of the plant sat around the plane. They brought wooden slats, attached them to the outer contour of the motor and to the fuselage ... We could not apply the classic scheme for installing an air-cooled motor with a "skirt" to release air without a serious alteration of the fuselage. Then, on the sides of the aircraft, large "scoops" were made on the left and right, through which the cooling air came out. Opposite the scoops, the temperature of the cylinder heads was normal, and they overheated above and below. Valedinsky then began to remake the deflectors for each cylinder, and he managed to achieve temperature uniformity for all cylinders. This was one of the decisive factors in the creation of a new fighter ... By the time Lavochkin

arrived, one side of the aircraft had been sewn up with a false side over the old skin. We put sectors of slats, and plywood on them. It turned out a round fuselage But when the plane was almost ready, the State Defense Committee issued a decree on the transfer of plant No. 21 to Yakovlev and the transition to the production of fighters

"Yak-7". Lavochkin and his design bureau were ordered to relocate to Tbilisi, to plant number 31 ...

The new plane was completed at an incredible pace, without calculations, without drawings, "on one leg". On March 21, 1942, the newborn was rolled out to the factory airfield, and the factory pilot G.A. Mishchenko lifted him into the air. The first flight did not last long - the temperature of the oil in the engine rapidly went to the red line. Nothing else could be, since the oil cooler from the serial LaGG-3 was "attached" (you can't pick another word here) to an engine one and a half times more powerful, and therefore requiring more heat removal. Be that as it may, the first flight of the new fighter took place, which was immediately reported to Moscow. Moscow responded with the arrival of a commission of two engineers and two test pilots from the Air Force Research Institute and the LII NKAP. 5 (five) flight days were allotted for the decision of the commission.

In the meantime, Yakovlev's firm aggressively settled down in a new place. The plane (then it was still called "LaGG-5", the name "La-5" came later) was simply not allowed back into the shop. Then they banned the use of the factory airfield. Then the Lavochkin design bureau was removed from the "gasoline allowance". "LaGG-5" was run illegally, at the expense of the funds of the senior military representative. Lavochkin's car became a joke, and the general designer went to work on foot. Through deep April puddles. Finally, a formidable order from the State Defense Committee came: to load the design bureau and the plane into trains and immediately leave for Tbilisi.

On April 22-23, pilots A.P. Yakimov and A.G. Kubyshkin began "commission tests" of the new aircraft. For flights, they used a runway of a military air defense airfield flooded with melt water, ten kilometers from the plant. Everything broke down in flights: the flaps release mechanism failed, the oil pipeline broke and the cockpit lantern was flooded with black used oil, the engine either stalled on landing, or, on the contrary, "refused" to slow down. When landing (in fact, an emergency one), after the second flight, the car stood on its nose, swayed - but did not fall forward, breaking itself and killing the pilot, but backward, on the tail wheel. The good fairy, who obviously flew into Gorky in those days, took pity and saved the lives of courageous pilots. No one died during such enchanting "tests", the plane remained intact, the identified shortcomings were eliminated right in the field, day and night, in the light of car headlights. Overall result: you can fly, but the engine gets very hot. Moscow thought and gave ten days to correct the defects of the new aircraft.

History knows the name of the guy who went into the record store of the glorious city of Liverpool and asked for a record with the group's records that he was playing in the Cavern pub (this question attracted the attention of B. Epstein, who went, listened and decided to take on the "promotion" of the quartet, which under the name "Beatles" forever turned the world of music). Unfortunately, to this day, the name of the worker of plant No. 21 is not known, who found a wooden packing box in the corner of the workshop, and inside the box there was a brand new radiator with a factory passport. It was a powerful radiator, which the Yakovlevites brought with them for installation on a fighter with an M-107 engine. The required heat removal from the oil system of the M-107 and M-82 engines was approximately the same, so this radiator could solve the main problem. The legend says that Lavochkin forbade taking someone else's, but the team that went into courage

did not listen to him. In one night, they knocked out a new duralumin fairing to a new radiator and screwed it all to the plane. Now the future "La-5" flew, and the oil in it no longer boiled. Corkscrew tests were carried out on the morning of May 6, 1942. This deadly exercise can only be done after careful calculations and

blowing in a wind tunnel. Therefore, they decided not to even talk about the corkscrew to Lavochkin. Do not upset in vain.

... It was not yet five in the morning when everyone gathered at the plane. Yakimov lifted the plane into the air. At this time, Lavochkin came to the airfield: - What kind of flight is this? We've finished testing! ... Yakimov made a gentle turn, began to slow down, made several trial runs, completed half a turn of a corkscrew to the right and left. Lavochkin's head was completely slung over his shoulders. Yakimov made a turn, exited normally, made two turns, the machine obeys, exits without delay. Lavochkin began to straighten up a little...

Aviation does not forgive even a hundredth of such liberties. Hundreds of planes have crashed after making the most harmless-looking changes to long-established and reliable machines.

According to all the laws of logic, aerodynamics and statistics, the history of the birth of La-5 should have ended in disaster. But it passed. On May 20, a new GKO decision and an order from the NKAP were issued: to return Lavochkin Design Bureau to plant No. 21, to withdraw the task of producing the Yak-7 from the plant, and to begin production of the LaGG-5 fighter with the M-82 engine. The first 200 serial machines left the factory with "overhead sides" in the forward fuselage -

the designers simply did not have time to draw a normal design for the new fuselage ...

Only two years later, the aircraft assembled in a wild hurry turned into a regularly and reliably flying La-7 fighter. The use of the notorious "delta wood" was abandoned almost completely, the wing was made with normal metal spars, the engine was boosted and equipped with a direct fuel injection system. "La-7" became the best Soviet fighter of World War II. In appearance, it turned out to be like two drops of water similar to the Polikarpov "I-185" with the M-82 engine. The same "I-185", the state tests of which (we repeat this again) ended with enthusiastic reviews of the pilots on March 28, 1942. However, one external similarity is not enough. According to all performance characteristics, "La-7" slightly, but fell short of the level of "I-185". There is nothing offensive in this statement for Lavochkin and his associates - an altered suit produced by the Red Seamstress factory will always be somewhat worse than a product from the best Parisian couturier. The only thing that was absolutely the same was the installation scheme of the guns firing through the plane of rotation of the propeller, and the design of the synchronizers. It's just that the Polikarpov Design Bureau (earlier than anyone else, still on the "seagull" born in 1940, worked out the installation of guns over the "star" of air cooling) transferred these drawings to Lavochkin.

Nikolai Nikolaevich Polikarpov was lucky to live to see the launch of La-7 in a large series. He died on July 30, 1944. The patriarch of Soviet aviation was then only 52 years old.

We will now try to sum up the general results. What did Soviet aviation get after Comrade Stalin decided to personally undertake its technical re-equipment at the beginning of 1939? What were the

"young, obscure designers" able to give to the Motherland "at the most difficult time for her"?

The main component of the Air Force - attack aviation - entered the war with the aircraft of Ilyushin and Tupolev / Arkhangelsky ("DB-3f" and "SB / Ar") and fought until the end of the war on the aircraft of Ilyushin and Tupolev / Petlyakov ("DB-3f", "IL-2", "Pe-2"). The "young unknown" did not give the Motherland a single serial bomber or attack aircraft. All the fuss and excitement of 1939–1941 ended with the appearance of a couple of hundred Yak-2/4 unsuitable for combat operations and painful, many years of attempts to "bring to mind" the long-range bomber "Er-2". The mountain gave

birth to a mouse. Fighter aviation began the war exclusively on Polikarpov's vehicles ("I-16", "I-153", "MiG-3"), then fought on vehicles

Yakovlev and Lavochkin, one of which ("La-7") by the end of the war came close in terms of its tactical and technical characteristics to the level of Polikarpov's I-185.

If the highly experienced design teams of Ilyushin, Polikarpov, Tupolev had not been interfered with, if the engineers of the good old Russian school had not been imprisoned, shot on absurd denunciations, then they would have simply done what they were actually doing.

Namely: -

the Ar-2 bomber, which successfully passed state tests, and the I-180 fighter, which successfully passed state tests, were launched into serial production;

- brought to the stage of readiness for production and combat use the world's best fighter "I-185" and the world's best front-line bomber "Tu-2".

Taking into account the

fact that both Ar-2 and I-180 were only a deep modernization of the SB bomber and I-16 fighter, which had long been mastered by industry and the flight crew, it can be safely assumed that by June 1941 of the year with new combat aircraft it would be possible to re-equip most of the aviation of the western military districts. Taking into account the fact that work on the I-180 took place under conditions of open persecution of Polikarpov, and work on the Ar-2 was carried out under conditions of arrest and conviction of most of the Tupolev Design Bureau (the original developer of the SB-Ar series), it can be assumed that under normal conditions, the development and mass production of the I-180 and Ar-2 would have been completed even earlier. Insofar as we are not talking about projects and fantasies, but about aircraft that actually existed in metal and flew in the air ("I-180", "I-185", "Ar-2", "Tu-2"), the above forecast can be considered highly probable.

It is much more difficult to answer the following question: "What would happen if Comrade Stalin really managed to "postpone the start of the war with Nazi Germany" for a couple of years?" The question is very difficult. The Soviet-German war that began in June 1941 so changed everything (economics, politics, morality) in these two countries, so qualitatively changed their relations with other countries, that extrapolation of military development trends to the hypothetical situation "if there were no war" can lead to serious prediction errors. And the author would not voluntarily climb into the jungle of reasoning on the topic "what would happen if" ... If only the Soviet "historical science", with

extraordinary lightness in thoughts, without even bothering to attempt a comparative analysis

trends in the development of aviation science and technology in Germany and the USSR, did not claim that it was very beneficial for us to "pull off". Why? But because "then the Soviet Union would have had time to complete the rearmament of the army in general and military aviation in particular." This strange (to put it mildly) hypothesis petrified from countless repetitions and turned into an indisputable truth in the minds of millions of readers. Not to mention the fact that only a defeated army is capable of "completing rearmament", the very logic of such reasoning is no good. Yes, of course, 15 minutes of extra time in a football match is guaranteed to lead to victory. But on one condition: if the entire opposing team sits on a bench and allows you to score goals into an empty net. And if not? And if the enemy also tries to use each of these 15 minutes to strengthen his defense and storm your gates?

Hitler's Germany began preparations for a world war with a huge (relative to the Soviet Union) delay. At that time (the beginning of the 1930s), when, in the context of the most severe global economic crisis, emissaries were buying up aviation, aircraft engine, instrument-making plants, buying up and stealing technological secrets and luring leading Western specialists with fabulous salaries, Germany was plunging into a quagmire of internal political strife and actually balancing on the brink of civil war. At that time (mid-30s), when mass production of combat aircraft of a technically new generation was unfolding in the USSR (high-speed monoplanes with retractable landing gear and wing mechanization), Hitler was just "cleansing" the political space of his power in Germany, and the newborn Wehrmacht was carrying out exercises with cardboard models of tanks.

At the very first military clash (Spain, 1936), it turned out that Soviet tanks and planes were better than German ones. What was not known then, but it is well known now, is that the Soviet military industry outnumbered the enemy in quantitative terms, releasing in 1936-1937. military equipment in huge, unthinkable for Germany, quantities. In the future, Hitler's Germany was able, relying on the centuries-old traditions of the skill of

German engineers and workers, on the huge scientific and technological potential of its industry, by the beginning of the world war, to catch up with the Soviet Union in terms of the technical characteristics of aviation weapons. That's it - just catch up. The Heinkel-111 bomber was no worse than the DB-3f, the high-speed Dornier-17 was no worse than the SB, the newest (for September 1939) Messerschmitt-109E fighter was even better in some ways. -16".

As the Germans caught up. In the number of aircraft produced, the Soviet Union was still ahead. In 1940, the warring Germany produced 1877 single-engine fighters and 3012 bombers, the USSR - 4179 and 3301 respectively. The following year, 1941, Germany already overtook the Soviet Union in terms of the number of twin-engine bombers produced (3783 versus 2861), although it was even further behind in the production of fighters (2852 versus 7080). In general, the quantitative indicators of the

production of combat aircraft in the Soviet Union were higher all the time. With one exception, Germany produced 23,805 single-engine fighters in 1944, in an attempt to counter the massive Allied strategic bomber strikes. In the same year, "only" 16,703 fighters were produced in the Soviet Union (including 11,607 Yakovs). But this breakthrough in the production of fighters was the last effort of the German industry - already at the end of 1944, production and the transport system began to irreversibly fall apart ... As for the qualitative, scientific and technological achievements, in this aspect the German aviation industry quickly caught up, and then

significantly outstripped Soviet Union. Success was achieved by concentrating the efforts of German science and industry in key areas: aircraft engines, weapons, radar, automation and radio communications. The names of the aircraft remained the same: Messerschmitt-109, Junkers-88. Their appearance changed little or nothing. The "stuffing" was radically updated and improved, especially the engines. The first production Messerschmitt-109 left the factory in Augsburg in 1937 with a Jumo-210D engine with a take-off power of 680 hp. The "Messer" of the E series already had a DB-601A engine with a maximum

short-term power of 1175 l / s. In the spring of 1941, the production of the F-4 series begins with the DB-601E engine with a take-off power of 1360 hp. The following year, a new DB-605A engine with a take-off power of 1475 hp is installed on the same airframe. With a water-methanol injection device and using gasoline with an octane rating of 96, the DB-605AS engine developed 2030 hp. at an altitude of 500 meters. Simply put, in 6 years (from 1937 to 1943), the power of the Messer engine increased exactly three times! "Junkers-88" (which was to become the most massive twin-engine bomber of the Luftwaffe) began its flight biography with Jumo-211B-1 engines with a capacity of 1200 liters. s, on the eve of the invasion of the USSR, the

production of Junkers of the A-4 series begins s

motors Jumo-211J-1 with a power of 1340 hp. At the end of the war, the Jumo 213E was installed on the Junkers - an engine with a three-speed two-stage supercharger and a nitrous oxide injection device that developed 2000 hp. (there were variants of the "213th" with a short-term afterburner power of 2300 hp). With the Jumo 213 engine, the maximum speed of the Junkers-88 in the long-range reconnaissance version reached 640 km / h at an altitude of 8540 m. According to A.S. Yakovlev, ***"the Junkers-88 twin-engine bomber, although with great difficulty, still survived until the end of the war at a more or less satisfactory combat and technical level ..."***. And what happened with us? "Pe-2" started a war with M-105 engines with a capacity of 1050 liters. with, and ended the war with them. The DB-3f was produced for five years

(from 1940 to 1945) with the same M-88 engine, the take-off power of which was slightly increased only at the end of 1943 (from 1100 to 1250 hp). Yakovlev's fighters (from the experimental I-26 to the most advanced Yak-3) fought back the entire war with the M-105 engine. True, already in 1942 (despite the protests of the engine designer V. Klimov), the engine supercharger was reconfigured to obtain maximum power at low (2–3 km) altitudes. The result was the M-105 PF with a maximum power of 1180 hp. In 1944, the power of the M-105 PF-2 reached 1240 hp. - and this turned out to be the limit of the achievements of domestic motor building. With such an engine, they both flew and fought against the "Messers" of the G and K series with engines of 2000 hp. Yes, and if this M-105 worked fine! The Yaks returned from the flight, filled with engine oil from bow to keel. The most terrible was the loss of forward vision, which occurred at the most intense moment of the battle - jets of oil from the engine running at maximum speed flooded the cockpit lantern. It came to the point that "craftsmen" at front-line airfields installed oil

deflectors on the hood of the Yak or attached an enema with gasoline for flushing to the cockpit lantern

glass oils...

We will not bore the reader with another batch of tables and figures. And without tables, it is clear that the "Messer" with a motor of 2000 l / s. was better. Miracles do not happen, and if the Yak-3, this notorious "lightest fighter" approached the Bf-109G in terms of basic flight parameters, then this had to be paid dearly. The "lightest" "Yak-3" became due to minimal armament, minimal safety margins, flight range less than that of the first experimental "I-26", lack of basic equipment: in 1944, some series of "Yak-3"

produced with one receiver, without a transceiver radio station. And this is in 1944! The

achievements of the "gloomy German genius" were by no means limited to bringing the "ordinary" piston engines to the limit of possible perfection. On April 2, 1941, that is, even before the start of Operation Barbarossa, the Heinkel He-178, the world's first twin-engine jet fighter, made its first flight. A year later, on July 18, 1942, the first flight of the Messerschmitt Me-262 twin-engine jet fighter took place. This aircraft was to become the world's first mass-produced jet fighter. With the most powerful weapons (four 30-mm guns), the Me-262 developed a speed of 800 km / h near the ground, the maximum speed at an altitude of 6 km reached 865 km / h. This miracle of technology, ahead of its time by at least five years, was created not in one, experimental copy (although this would be a huge achievement!), But was produced in a large series: by the end of 1944, 452 "Me-262" were manufactured, in total, 1433 Messerschmitt jet engines and 6424 Jumo-004 turbojet engines were produced.

The Arado Ar-234 twin-engine jet bomber began testing in 1943 and went into series production the following year. Ceiling - 11500 meters, maximum speed 752 km / h. On the Ar-234C modification with four BMW 003 turbojet engines, a speed of 874 km / h was achieved. And this super-bomber, absolutely invulnerable to Soviet air defense of the 1944 model, was created not in a single sample, but in the amount of 214 copies. In addition, there was an ultralight (take-off weight of 2800 kg) Heinkel

He-162 single-engine jet fighter. The first flight took place on December 6, 1944. With the BMW-003 engine, the fighter developed a maximum speed of 834 km / h (900 km / h in afterburner mode) and was able to fly 970 km at an altitude of 11 km. At the time of the capture of aircraft factories by the Allied forces, 116 He-162s were produced and another 800 aircraft were at various stages of assembly. In addition, as early as October 1941 (the time the battle for Moscow began), flight tests of the short-range missile

fighter-interceptor (in fact, a reusable manned anti-aircraft missile) Messerschmitt Me-163 began. A liquid-propellant rocket engine with a thrust of 1700 kgf worked for 6 minutes, accelerating the aircraft to a speed of 955 km / h, and provided a climb of 9 km with a phenomenal

vertical speed of 80 m / s. Thanks to the use of the Me-163 large-swept triangular wing (in contrast to the stillborn Soviet project of the Bi-1 rocket fighter)

fully retained stability and controllability at transonic speeds. Serial production began with a huge delay, in February 1944. A total of 360 Me-163s were produced. In addition, an unmanned aircraft projectile

("cruise missile" in modern terms) "Fiziler" Fi-103 (better known as "V-1") with a ramjet engine was produced in huge series. 11,300 (eleven thousand three hundred) of these "cruise missiles" were fired from the Baltic coast towards London. Finally, the highest achievement of German engineers was the development, creation and launch into large-scale production of the V-2, the first operational-tactical range ballistic missile in history. A liquid-propellant rocket engine with a thrust of 26,000 kgf accelerated the rocket to hypersonic speed in 80 seconds of operation, allowing

it to go beyond the earth's atmosphere to a height of 80-120 km and achieve a horizontal flight range of more than 300 km. It is hard to believe this, but the first successful launch of this true miracle of science and technology took place on October 3, 1942. Looking ahead a little, we note that it took both the Soviet Union and wealthy America a long four years just to copy and launch rockets with similar parameters. Until the end of the war, Germany produced and launched 10,800 (ten thousand eight hundred!!!) ballistic missiles at facilities in England.

All of the above is only one of the components of the gigantic successes of German science and technology. We have not yet said anything about the developed, tested, launched in a large series of ground and airborne radars, jamming and electronic countermeasures systems, about guided planning bombs, about infrared guidance systems, about on-board gyroscopic shooting sights, about several types of unmanned radio-controlled anti-aircraft missiles ... All these - and many, many others - the latest weapons, the German industry

created simultaneously with the mass production of "conventional", traditional piston engines and aircraft, under the conditions of a naval (i.e. so, for example, on December 24, 1944, 1,300 four-engine bombers bombed the V-2 launch positions). It is terrible to think what Nazi Germany could have armed herself with if she had not had to spend her limited resources on the production, in particular, of 23,805 conventional fighters in 1944 alone. And what would happen if the Germans threw the best minds not on a three-speed two-stage centrifugal

supercharger for the Jumo 213E engine, but for a high-speed centrifuge for separating uranium isotopes?

Let us return, however, to the pre-war Soviet Union. How did it happen that in 1939-1941, as a result of the titanic efforts of the "party and government", our military aviation and aviation industry only lost time, and then lost that technical superiority over the Luftwaffe, which was so clearly manifested during the war in Spain? Despite the author's ardent desire to give extremely short and simple answers (after all, this book is a popular reading, and not a scientific monograph), it will not work to answer the above question in monosyllables. Let us briefly outline only three components. First, in order to correctly understand the reasons for the lag, one should

remember - where did the previous successes come from? In the key component - the production of aircraft engines - the entire Soviet aircraft industry was based on Western licenses, technologies, and equipment. The brilliant foresight of Comrade Lenin came true - in the bourgeois West there were (and in sufficient numbers) "useful idiots" who, in the early 1930s, in the midst of an acute economic crisis, with great pleasure sold to Stalin entire factories and technological lines for the production of aircraft engines. Namely, imported motors made on imported equipment under the modest names M-17 (German BMW-6), M-22 (French GR-9Aq), M-25/62/63 (American R-1820), M-100 / 103/105 (French 12Ybrs), M-85/87/88 (French GR-14K) lifted Soviet aircraft into the sky.

In the late 1930s, the situation changed dramatically. No, there are no fewer idiots, their capabilities have decreased. French ... to put it mildly - politicians brought their country to complete collapse, and now there is nothing to profit from in France (and the German occupation authorities would not allow anything technically valuable to be sold "to the side"). The English "idiots" were decisively pushed aside from the helm by Churchill and his team. The American President Roosevelt, a great friend of the Stalinist Union, was nevertheless forced to give in to public pressure and in December 1939, after the Soviet bombing of residential areas of Helsinki, to extend to the USSR the requirements of the so-called "moral embargo" (a system of mandatory government "recommendations" prohibiting the sale of aviation technologies to aggressive states). Fascist Italy remained a constant partner (Italian torpedoes manufactured by the Krasny Progress plant under the index 45-36N were in service with the Soviet aviation and navy until

early 50s), but Italian aircraft engines are among the best in the world did not relate at all.

Only Germany remained - but there they had already got rid of the gullible "idiots", they had got rid of them decisively and cruelly. Of course, in the most difficult time for him, at the beginning of the World War, Hitler had to sell Stalin the latest aircraft. Of course, along with the aircraft in the spring of 1940, engines arrived in the Soviet Union, including the DB-601A engine installed on the Messerschmitt with a direct fuel injection system. Alas, the Soviet aircraft engine industry - even having a copy in front of it - was unable to establish mass production of injection equipment in a short time.

The first (and last) serial aircraft engine with direct fuel injection was the M-82FN, which appeared on the La-5 / La-7 fighters only in 1943. It was not possible to equip other large-scale engines with injectors (M-105 on Yaks, M-88 on DB-3f) until the end of the war. Just as it was not possible to bring the powerful "two-thousanders" (M-71, M-90, M-120, AM-36) to the stage of mass production. Just as it was not possible to "bring to mind" the unique aviation turbodiesels of Charomsky. Just as it was not possible to achieve stable operation of the M-107 engine (the same one, the experimental model of which Yakovlev stole from Lavochkin). They suffered with the "107th" engine until the very end of the war: it was either launched into a series, then removed again, the engine was warming up, "driving oil", did not produce even 25 engine hours, as a result, the Yakovlev Yak-9U fighter (quite worthy competitor "Messerschmitt" "Bf-109" G) could not become a full-fledged combat vehicle. The second, fairly obvious and indisputable reason for the scientific and technological backwardness that emerged

at the end of the 1930s lies in mass repressions, the victims of which sometimes were entire design teams. So, in 1937-1938, the RNII, the main scientific center for rocket technology, was almost completely destroyed. Director of RNII I.T. Kleimenov was shot, his deputy G.E. Langemak - shot, the future General Designer of space rockets S.P. Korolev was sent to the Kolyma mines, the future General Designer of rocket engines V.P. Glushko was arrested and received 8 years in labor camp.

In 1938, the leadership of the Design Bureau of the Perm Aircraft Engine Plant (aircraft engines of the Wright-Cyclone series, i.e. M-63, M-71, M-82) was arrested in almost full force in 1938. For some reason, the Chekists especially liked aircraft engine plant No. 29 in Zaporozhye (the line of the French Mistral-Major, that is, M-87/88/89, M-90) - five chief designers were replaced there in three years: Nazarov,

Vladimirov, Filin, Tumansky, Urmin. In the prison "sharashka" Charomsky and his colleagues created their turbodiesel ... It

must be assumed that if German engineers at that time were told that their Soviet competitors were considering new designs on prison bunk beds, in the intervals between interrogations "with passion" and death sentences, then they would consider it false and too much unbridled anti-communist propaganda.

Alas, "he never studied and did not fully understand dialectics." These words Ulyanov-Lenin wrote about another of his students (Bukharin), but they also fully apply to the characterization of our main character. Stalin did not understand the difference between the secretary of the party committee and the designer of aircraft, and did not understand that the methods of their "selection and placement" should be different. From the party secretary (as well as from the Stalinist general) it was required to be able to pound the table with his fist, yell at subordinates and transmit reports on milk yields and gains (as well as losses and trophies) to Moscow with minimal lies. The method of the "rat king" has fully justified itself in the search for and education of just such personnel. The new chiefs of the 1939 model knocked so that the table fell apart, yelled heart-rendingly, and were afraid to lie to the Master (they only became bolder after June 22, 1941). Zhukov and Timoshenko, of course, were more in line with Stalin's requirements than the drunken Blucher and Dybenko. Alas, in the subtle art of the theory of elasticity, aerodynamics and thermodynamics, such methods could not but lead to disastrous consequences ...

Chapter 18

KILLER PLANES

The third reason for the progressive lag of the Soviet aviation industry behind the German enemy should be called an erroneous, absolutely non-dialectical choice between quality and quantity. This question is very complicated, but Stalin solved it very simply. Too simple and clear. Shakhurin writes in his memoirs that Stalin set the task of bringing the production of combat aircraft to 70-80 aircraft per day (i.e., 2000 per month), which significantly exceeded the actual production of Germany and England combined). Even before the start of the war, a special construction headquarters was created as part of the NKAP, under which 25 construction and installation trusts were transferred! 9 new aircraft-building and 6 aircraft-engine plants were founded, in addition, in 1940 alone, 60 plants from other people's commissariats were converted to the production of aviation equipment. (107) By the beginning of the war, there were already more than 130 factories in the NKAP system! (108)

On November 16, 1940 (that is, seven months before the start of the war), by decision of the Politburo of the Central Committee, the directors of engine and aircraft factories were obliged to give daily reports to the Central Committee of the All-Union Communist Party of Bolsheviks on the number of aircraft and engines accepted by the military representatives, broken down by each type. (16) You can be sure that from that moment on, the designer became the worst enemy for any director. The designer still cannot calm down, then he needs to lengthen the wing by 15 cm, then narrow the fuselage by 10 cm, and this is a restructuring of production, replacement of all equipment, templates, stocks. And the director needs to go to the "turntable" and report to Moscow how many production aircraft he has produced today, and God forbid that there are fewer of them than yesterday.

... Bringing Churchill to me, he said: "Here is our people's commissar of the aviation industry, he is responsible for providing the front with combat aircraft, and if he does not, we will hang him." And Stalin made an expressive wave of his hand. Pretending that I really liked this joke, I laughed merrily ...

(98)

Life has become better, life has become more fun. But in short. Shakhurin and Yakovlev (People's Commissar for the Aviation Industry and his deputy) with masochistic enthusiasm tell how strict the Boss was, as in response to any proposal for

improvement, change, modernization of something somewhere, Stalin invariably answered: do it, but I will not remove a single serial machine from the plan. Shakhurin in his memoirs cites a completely wild fact:

At the beginning of the war, when the front's need for aircraft was not yet satisfied, Stalin proposed transferring all the machine tools of the experimental design bureaus to the factories. Again, I objected, convinced that, firstly, the designers did not have much equipment, and secondly, they were constantly working on modifying aircraft, and they needed machine tools. Stalin stated firmly: "Now I am a serial worker,
the production of aircraft should increase. And the decision was made, but, I confess, we lowered it to brakes...

"They put on the brakes." Most likely, Stalin did not forget about the order he had given (he had a phenomenal memory, and there was a notebook with a pencil on the table), but he simply realized a little later what a catastrophic consequence the defeat of all the design bureaus could lead to, and even at the beginning

of a protracted war ... I have no doubt that some of the readers will be indignant. After all, it was not just that Stalin was going to actually destroy all the design bureaus of the country, but in a situation **"when the front's need for aircraft was not yet satisfied."** And our slogan was this: "Everything for the front, everything for victory." And that's why I had to...

No, dear comrades. That's not why I had to. The complex philosophical question of what is more important - quantity or quality - in relation to the reliability and survivability of combat aircraft is solved very simply and unambiguously. Quality, that is, reliability and combat survivability, is more important. Why? Because in the system called "military aviation" the most important, most valuable and most scarce element is not aircraft, but experienced pilots. Many low-quality aircraft falling apart in flight reduce the number of living pilots, thereby catastrophically weakening the entire system. Emergency, round-the-clock work, teenagers losing consciousness from hunger at the machine tools, "front-line brigades" eliminating factory defects at military airfields in the snow and rain, and other scenes of the "great labor battle" so beloved by Soviet propagandists, paradoxically did not increase, but decreased the number and effectiveness of combat aviation operations. From January 1, 1943 to May 9, 1945 (that is, already at the final stage of the war, when

enemy aircraft raids on "peacefully sleeping airfields" and

"Encirclement boilers" of 41 are a thing of the past), the irretrievable losses of the personnel of the Red Army Air Force amounted to:

- 9456 people were

- killed; - 4438 people died in accidents and

- catastrophes; - 10941 people went missing. (35, p.

312) Even if we assume that only half of the "missing" actually died due to technical accidents, then in this case the number of those killed by their own aircraft turns out to be slightly less than the number of those killed by the enemy.

I agree, at first glance, such an assumption will seem completely unbelievable and even insulting for the Soviet aviation industry. But here is what the aircraft designer A.S. writes in his memoirs. Moskalev: **"... On one of the unremarkable days, two generals appeared at the plant: Lieutenant General Ageev and Major General Gurevich. At first they went to I. V. Fedin, and he sent them to me ... The generals told strange and sad things. The war was over, but the situation was not calm. Military aviation was in a state of constant combat readiness. Regular flights of our fighters were made. And suddenly it was discovered that the loss of Yakovlev's fighters had almost not decreased, although hostilities were no longer being conducted** (emphasis added by me. - **M.S.**). **What's the matter? It turned out that the planes were destroyed in the air during maneuvering, as their wings were broken and, as a rule, the pilots did not even have time to parachute ... "**

Further, Moskalev says that A.S. Yakovlev "turned the arrows" on the industry, which allegedly glued the wings with the wrong glue. After that, **"the perpetrators were severely punished."** Moskalev, on the other hand, was given the task to figure out and improve the gluing technology, but in the process of work, the engineering team came to the conclusion that the cause of the accidents was not a technological defect at all, but a design one - the same insufficient wing strength, which was the problem of Yakovlev fighters starting from the I- 26". By

the way, why were the wings (and not only the wings) on Soviet fighters glued? Gluing a multilayer "package" of resin and veneer is a very complex, time-consuming operation that requires the strictest technological discipline. Why was it not replaced by a simple, understandable, verifiable, mechanizable (group press riveting) technology for assembling an aircraft airframe from duralumin sheets?

The answer to this question is "everyone knows". They "know" so well that the very formulation of the question seems absurd. With duralumin in the country there was "tension"; All of Europe worked for Hitler, but only for us

America, and even then not all, but only the northern half of the mainland. So I had to glue combat aircraft using the technologies of a furniture factory.

As for the "deficiency of aluminum", we must honestly admit that aluminum was really lacking. Just as there was not enough coal, oil, steel, cars, tractors, money. Resources are always less than you want, money is always not enough. This is their (resources) inherent property. Especially if military equipment is produced in such quantities as it was produced by the "engaged in peaceful creative work" of the Stalinist empire. Here are just two examples: a month after the start of World War II, on October 1, 1939, 12,677 aircraft were in service with the Soviet Air Force. (1, p. 352) This is almost twice as much as in Germany (4093), England (1992), USA (1476) combined. (20, p. 217) In 1939–1940 belligerent Germany produced 3377 Bf-109 single-engine fighters. The Soviet Union in the same two "peaceful, pre-war" years produced 6180 I-16 and I-153 fighters (18, 32) Where was it possible to get so much aluminum? I had to build the Stupino aluminum plant - at that time the largest in the world. In May 1941, its first stage reached its design capacity. But aluminum was still not enough? Let's try to check the history with the methods of another science - arithmetic. Weight

all-metal fighter aircraft glider
"Messerschmitt-109E" was 650 kg. How much duralumin should be spent on assembling such a glider? The question is difficult. On the one hand, the most loaded nodes and parts (spar shelves, docking nodes, fasteners) are made not from aluminum alloys, but from steel. On the other hand, it is impossible to cut a duralumin sheet in such a way that all the metal goes into action, without scraps and chips. Without further ado, let's assume that one ton of duralumin is needed for one glider (at the same time, we probably played it safe a little, but this is not the main thing).

For the entire period of the war, 54,606 fighters of all types were produced (from MiG-3 to La-7).

In total, the total need for duralumin is 55 thousand tons. Is it a lot or a little? Which definition should be used in this case: "as much as 55 thousand tons" or "only 55 thousand tons"?

Real, "professional" historians solved this question simply - with the help of shamanic howls about "history that gave us little time" and Stalin, who could not "postpone the start of the war." We will go the other way. Let's just compare this figure with the total volume of aluminum production and lend-lease deliveries.

Until very recently, the figures for the production of non-ferrous metals in the Soviet Union were classified. Modern researchers give estimates of aluminum production in the USSR from 1941 to 1945 inclusive in the range from 250 to 330 thousand tons. More clarity on allied supplies. From North America (USA plus Canada), the USSR received 290 thousand tons, and even England, choking from a lack of raw materials, threw in a "miserable" 35 thousand tons. Total: at least 575 thousand tons of aluminum. Least. And for all the fighters - if you make them from duralumin - you need only 55 thousand tons. Less than one tenth of the total resource! Taking the DB-3f bomber for "three fighters", and the "Pe-2" for "two fighters" (with such a gap between the resource and the need, the accuracy of the calculation no longer matters), we get another 34,648 "conditional fighters", i.e. another 35 thousand tons of aluminum. Only 90 thousand tons. Even if we double this figure (to cover all possible errors in our very rough estimate), we still get a figure of one third of the resource of aluminum. Where did the acute deficit come from?

And one more small example to illustrate how much duralumin was in the USSR.

Shakhurin in his memoirs in passing, in one paragraph, recalls such an incident:

... Once I was informed that 12 thousand tons of duralumin were unloaded near one of the Siberian plants. It turned out that the cargo arrived at the place, and from there, without our knowledge, it was shipped to the nearest plant ... It was necessary to urgently transport these "surpluses" to all those in need.

But, as a joke, to urgently transport 12 thousand tons of duralumin to different parts of the

country! Workers loaded aluminum after school hours... Local party and Soviet organizations helped...

That's it. 12 thousand tons. 600 wagons were unloaded by mistake "near one of the Siberian plants." You had to have a lot of it to be so wrong. At the rate of 1 ton per airframe, this amount could be more than enough for the production of 9918 all-metal fighters - that is how many "glued" ones were actually produced in 1942. At the same time, mind you,

we have never asked the question of whether it was necessary to make all these 55 thousand fighter aircraft at all? No need to rush to answer, no need to shout "Everything for the front, everything for victory!" Half of these planes did not see the front. It's not a dirty joke, it's

statistics. We open the official statistical collection, ed. Krivosheeva (35) on page 350. We read. As of January 1, 1943,

the Red Army had 21.9 thousand combat aircraft. So it is written - "combat". Not educational and not postal. Of these, 12.3 thousand are in the active army. 56%, i.e. a little more than half. As of January 1, 1944, there were 32,500 combat aircraft in the Red Army. Of these, 13.4 thousand are in the active army. This is already noticeably less than half (41%). Exactly half of the combat aircraft is in the army on January 1, 1945 - 21.5 thousand out of 43.3 thousand combat aircraft. Of these 43 thousand, 24.2 thousand are fighters. Where was it possible to get such a number of minimally trained pilots? Was it necessary to glue tens of thousands of plywood wings when the Luftwaffe kept no more than 400-500 fighters at a time on the entire Eastern Front? As a very bold (even frightening even to me) hypothesis, it is worth thinking about the fact that

Comrade Stalin thought about a future World War III even before the end of World War II. Since it was not necessary to count on the supply of American aluminum in that future war (and even at the stage of preparation for it), Lend-Lease aluminum was accumulated in advance. Stored in piles of 12 thousand tons "at one of the Siberian plants." And the planes for finishing off half-dead Germany were glued on the knee of plywood. Another reason for the rejection of civilized technologies is extremely clear, and "His Majesty's Plan" does not require any conspiracy theories. An

insatiable idol of the Soviet era. The transition from plywood to duralumin aircraft construction meant a complete change in technology, equipment, and tooling. In a situation where every day it was necessary to report to the "party and the government" on the percentage of the implementation of the plan, they were afraid to even think about anything like that. That is why - and not at all because of the imaginary shortage of duralumin - the whole war was "driven by a plan" on aircraft in which the plywood wing skin came off in flight, the engines "fired with connecting rods", the cockpit canopy flooded with oil could not be opened by any effort, the heat in the cockpit "La-5" / "La-7" reached 60 degrees, and the red-hot control stick burned the pilot's hand even through a glove ... Naturally, someone had to answer for all this. Stalin could not plead guilty to himself, so in 1946, as a reward for the titanic - without

any quotes - work, the Owner sent his people's commissar of the aviation industry to the camp for 10 years. Do you know why? For the systematic release of low-quality products and postscripts. Together with Shakhurin to the torture cellar, and then to a prison cell for a long time

Commander-in-Chief of Aviation Novikov also went, who "wreckedly accepted wreckingly assembled aircraft from the NKAP." So sad was the outcome of the "great labor battle" invisible to prying eyes ...

Part 3 WAR

Chapter 19

RIGHT TO LIFE

The war for the Soviet Air Force began much earlier than that Sunday morning, when German bombs rained down on "peacefully sleeping airfields." The heaviest losses, and in the most important - command - link, Soviet aviation suffered already in May - June 1941. And to this day there is no clear explanation of why it was at the beginning of the summer of 1941 that a new wave of destructive repressions covered the leadership of military aviation and the military industry. It is completely incomprehensible why the new, young generals, whom he himself placed in all key positions just a few years (or even months) ago, did not please the Master this time. The so-called "pilot conspiracy" is striking in its irrationality, even against the background of other absurd and bloody deeds of the Stalinist regime.

I. Bunich in his well-known historical chronicle "Operation Thunderstorm" tried to come up with an action-packed detective version of what happened. Allegedly, Soviet intelligence agents at the headquarters of the Luftwaffe discovered a stream of secret information coming to the enemy from some traitors in the leadership of the Soviet Air Force. The enraged Stalin allegedly demanded to urgently find and neutralize the traitor, and this is where it all started ... The author of this book must admit that he had a great desire to "draw" an even more exciting intrigue, that is, to connect the "aviators' plot" with catastrophic defeat of the aviation of the western military districts in June 1941. Alas, nothing of the kind to offer the reader failed. Everything was boring, scary and vile. No conspiracy "Chekists" found. Nothing, no evidence of treason or even trivial espionage was found. The leaders of the Soviet Air Force, the heroes of air battles in the sky of Madrid and Khalkhin Gol, were killed just like that. More precisely, for the reasons that Stalin took with him to the grave. Owls. the secret certificate that L. Beria submitted to Stalin on January 29, 1942

(Archive of the President of the Russian Federation, fund No. 3, inventory No. 24, case No. 378, l. 196–211), contained a list of 46 arrested people who had not yet had time to shoot time. Next to each name, the essence of the charges brought was extremely briefly stated. This document immediately and unconditionally removes the sacramental question: "did Stalin himself believe in the guilt of his victims?" In this case, this question is inappropriate - there is simply nothing there that even the most gullible person could believe.

The jealous and ardent Moor Othello was presented with "material evidence" - a handkerchief. And although the conclusions from this scarf were absurd, you can understand the jealous - he was passionately in love with his Desdemona, that is, in legal terms, "was in a state of passion." There is nothing concrete in the "charges" brought against the arrested generals, there is not a single fact, not a single document, not a single real event, there is no motive for committing such a terrible crime, there are no accomplices "on the other side of the front" to whom the imaginary "spies" passed secret intelligence. There is nothing but stereotyped phrases: **"he is convicted as a participant in an anti-Soviet military conspiracy by the testimony"** of Petrov and Sidorov. Next to the name of the conditional "Sidorov" will be written: "Convicted by the testimony of Ivanov and Petrov." Moreover, quite often there are notes: "they refused to testify." Next to three names: the head of the Air Force Research Institute A.I. Filin, Commander of the Air Force of the Far Eastern Front K.M. Gusev, Chief of Staff of the Air Force of the Southwestern Front N.A. Laskin - there are two short words: "did not confess." But even from the point of view of the medieval "jurisprudence" of Comrade Vyshinsky, the absence of a confession - in the absence of other evidence - testified to the innocence of the accused

What could Comrade Stalin "believe" here? In the testimony of those who "confessed"? Could Stalin not understand the price of these "confessions" if he personally authorized the use of "measures of physical coercion" and did not even disdain to personally inform the lower party authorities about this (the well-known cipher telegram of the Central Committee of the All-Union Communist Party of Bolsheviks of 01/10/1939, in which the first secretaries of party organizations in the field explained that **"the use of physical force in the practice of the NKVD was allowed since 1937 with the permission of the Central**

Committee of the CPSU. ... The Central Committee of the CPSU believes that the method must be applied in the future ... "

Also striking is the obvious obsolescence of the accusations, in which the doomed "confess" or even do not confess (although this does not change anything!) Apparently, the "Chekists" were too lazy to come up with something new and relevant, related to the World War, Hitler, Churchill, etc. there are people who were shot many years ago! But, and this is the strangest thing, for all its stereotyped standardity, the "aviator case" lasted a very long time: if no more than three weeks passed from arrest to execution of Tukhachevsky and his "accomplices", then in this case from arrest in May 41 to execution On February 23, 1942, ten months had passed. Remains in

once again state that not all of Stalin's actions can be understood and explained from the standpoint of normal human logic ...

Without even trying to lift the veil of secrecy over this tragic story, we will give only a simple and impartial chronology of events. However, even chronology cannot be "simple" here - for what should be considered the starting point? Repressions, now subsiding, now flaring up again, did not stop for a single day. In particular, the extermination of the leadership of the People's Commissariat of Ammunition (in the summer of 1941 this "case" will inexplicably intertwine with the "aviators' case") began in the late autumn of 1940. On October 23 B.A. was arrested. Efremov, born in 1903, member of the CPSU (b) since 1930, head of the 2nd Main Directorate of the People's Commissariat of Ammunition of the USSR. Then, on December 11–12, three deputy people's commissars for ammunition were arrested: M.S. Inyashkin, V.Ya. Shibanov and N.M. Khrenkov. The People's Commissar of Ammunition himself was still at large (probably, quotation marks are needed here) and continued to manage his rapidly growing industry. The beginning of the "aviators' case" is traditionally associated with a meeting of the Main Military Council (GVS), which considered the issue of accidents in the Soviet Air Force. With the light hand of one

respected admiral, such a legend went for a walk:

During the report of the Secretary of the Central Committee Malenkov, the Commander-in-Chief of the Air Force

Rychagov blurted out from his seat: - You are forcing us to fly on coffins, therefore

the accident rate is high! Stalin, who was pacing along the rows of armchairs, froze for a moment, changed his face, and with a quick step approaching Rychagov, said: "You

shouldn't have said that." And having said

this once more, he closed the meeting. A week later, on April 9, 1941, by the Decree of the Politburo of the Central Committee of the All-Union Communist Party of Bolsheviks, Rychagov was removed from his post and doomed to death.

After the minutes of the meetings of the GVS (all the minutes, according to the compilers of the collection) were published in 2004, it became clear that the entire scene described, as well as Stalin's participation in the meeting of the GVS, were fictitious. In the period under review, there were four meetings of the GVS (12/11/40, 04/15/41, 04/22/41, 05/08/41), and Rychagov was not even mentioned there. On the other hand, the issue of accidents in Air Force units was indeed discussed in the Politburo. And, it's not the first time. In April 1941

another reason for the discussion was the numerous accidents that occurred in parts of long-range aviation. The result of this discussion was the Resolution of the Security Council of the Central Committee of the All-Union Communist Party of Bolsheviks of April 9, 1941 (Minutes No. 0). The blame was placed on four people: People's Commissar of Defense Tymoshenko, Head of the Red Army Air Force Rychagov, Head of Long-Range Aviation Proskurov, Head of Operational Flights Mironov. The most severe punishment was provided for Mironov: **"to be tried for an obviously criminal order that violates the elementary rules of flight service ..."** Further, the Politburo "offered" to remove Proskurov from his post and bring him to trial. As for Rychagov, he was also removed from his post (**"remove comrade Rychagov from the post of head of the Red Army Air Force and from the post of deputy people's commissar of defense, as an undisciplined and failed head of the Air Force ..."** People's Commissar Timoshenko was reprimanded for the fact that **"in his report of April 8, 1941, he, in fact, helps Comrade**

Rychagov to hide the shortcomings and ulcers that take place in the Red Army Air Force". That, in fact, was all. By the standards of that time - everyone got off quite lightly. No

instructions It was not given through the NKGB line. There is still no talk of any "doom to death." On April 12, 1941, order No. 0022 was issued by the USSR NPO . **-lieutenant of aviation comrade Rychagov to send him to study at the Academy of the General Staff of the Red Army"**. Moreover - and this is very important to note - already on May 4, a little "cooling down". The Politburo makes the following decision (minutes No. 32, paragraph 47): **"To propose to the Prosecutor of the USSR, Comrade Bochkov, in relation to Lieutenant General of Aviation Proskurov and Colonel Mironov, to consider their case in court and, bearing in mind their merits in the Red Army, limit themselves to public censure ..."**. (RGASPI. F. 17. Op. Z.D. 1039. L. 12). Usually, Soviet prosecutors agreed with the "proposals" of the Politburo, and after the "public censure" the incident seemed to be considered settled.

Concluding the "emergency version" of the reason for the extermination of the leadership of the Red Army Air Force, it is worth mentioning the letter with which Proskurov addressed to Stalin on April 21, 1941. (118) The first sentence of the letter reads as follows: **"I consider it my Party duty to report some considerations on the merits of preparing aviation for war."** Note that we are not asking for a pardon from the convict, but a letter from a communist addressed to the leader of the party (in terms of another era, a letter from a nobleman to the king, that is, "first among equals"). Further, after all the obligat

In such a case of glorifying the party and its leader personally, the essence of "considerations" begins. Politely, but persistently, Proskurov explains to Stalin that the main thing in military aviation is the level of combat training of crews, and not at all the amount of equipment destroyed during this:

... experts believe that under the existing rules for the flight service in the Air Force, they will not be able to fulfill the task assigned to them - the restrictions are too great. They visited several parts of the Air Force and made sure that the fear of commanders responsible for flights in difficult weather conditions and at night ... The task is clear - by all means to break this fear ... Over the past 4–5 months ... intensive work has been carried out to raise the quality of flight training of the Airborne Division, and by mid-April this year. 612 crews fly at night (30%), 420 crews (20%) fly in bad weather conditions, 963 crews (50%) are trained to fly in bad weather conditions. As you can see, the quality of training has grown more than TWICE.

This turning point in the quality of aviation air safety training is accompanied by a large number of flight accidents ... A significant part of the accidents are due to poor organization and discipline, as rightly indicated in the order of the EKO No. flight work, tirelessly improving the organization and order in the Air Force. Serious warnings and punishments, written down in NPO orders, will force the command staff of the Air Force to catch up, but at the same time they can increase the fear of accidents and thereby slow down the pace of quality training. Dear comrade. Stalin, in our history of aviation there was no case when a commander would be tried for poor preparation of a unit subordinate to him. Therefore, people

involuntarily choose the lesser of two evils for themselves and reason like this: "I will be scolded for shortcomings in combat training, well, in the worst case, they will be demoted by a step in my position, and I will go to court for accidents and disasters." Unfortunately, commanders who think this way are not isolated. Such sentiments exist and will continue to exist until the same

demands and responsibility are made for the combat readiness of the subordinate unit as for the accident rate ...

Let us repeat once again that this letter was written on April 21st. On May 4, the Politburo recalls the merits of Proskurov and explains to the prosecutor that the verdict is not

should go beyond "public censure". All this gives reason to assume that "dear comrade. Stalin" this time agreed with the sound logic of Proskurov's letter. No **"coffins"**, no **"You shouldn't say that"** is found. By the beginning of the war, Proskurov, still in the same high rank of lieutenant general, was in command of the Air Force of the 7th Army (Karelia). For a lieutenant general, this, of course, is a demotion, but nothing more. On May 10, 1941, the Politburo of the Central Committee of the All-Union Communist Party of Bolsheviks again returns to

discussing the situation in the Air Force units. The combat training of the Air Forces of the Oryol and Moscow military districts was recognized as unsatisfactory. In pursuance of the decision of the Security Council of the Central Committee and the Main Military Forces, on May 15, an order of the NKO of the USSR No. 0026 was issued on dismissal "for unsatisfactory leadership and disruption of combat training in the Air Force units during the winter period of 1940-1941." commanders of the Air Force of the Moscow Military District (P.I. Pumpur) and the Ordnance Military District (P.A. Kotov), commanders of a number of air divisions and regiments. And these decisions haven't condemned anyone to death yet. P.A. Kotov was transferred to the military academy, where he successfully served further.

The first arrest, which undoubtedly should be attributed to the "Aviator Case", occurs on May 18, 1941. Colonel G.M. Shevchenko, born in 1894, member of the All-Union Communist Party of Bolsheviks since 1926. There is no need to guess about the reasons for the arrest: the NPC of aviation weapons is the place where naive hopes (or, more often, advertising statements) about the combat potential of the next "wonder weapon" came into contact with the harsh prose of life (in particular, in 1942, it was in the Air Force Research Institute that it was found out that to destroy one German light tank, as many as 12 sorties of the Il-2 attack aircraft were needed. Working conscientiously in such a post, Colonel Shevchenko could not help but make numerous, influential enemies. Just as deadly was the position of the head of the Air Force Research Institute. The former head of the Air Force Research Institute, brigade commander N.N. Bazhanov, was shot in 1938. The new head of the Air Force Research Institute, a pilot known throughout the country for a number of long-distance flights, a highly qualified engineer, holder of two Orders of Lenin, Major General A.I. Filin at first enjoyed the great confidence of Stalin himself. People's Commissar of Aviation Industry Shakhurin writes in his memoirs:

One day, after discussing some aviation issue with Filin, Stalin invited him to dinner. I still remember Alexander Ivanovich's handsome, pale face, slender figure, attentive blue eyes and smile. At dinner, Stalin asked Filin about flight work and airplanes. interested

health ... Then, asking what kind of fruit Filin likes, he ordered to bring fruit and several bottles of wine to him in the car. Looked at him all the time affably and friendly.

A few weeks later, one designer had to report: "Comrade Stalin, Filin is slowing down the testing of my fighter, making all sorts of claims," and a sharp turn took place in the fate of Filin. — How so? Stalin asked.

- Yes, that indicates flaws,
and I argue that the plane is good.

Beria, who was present, muttered something to himself. It was possible to

understand only one word: "Bastard ..." And a few days later it became known that Filin was arrested ...

Shakhurin did not like Beria, and it is understandable - under Beria, Shakhurin got his 10 years. In

addition, Shakhurin's memoirs were written at a time when the next next "truth" was established: everyone was white and fluffy, only Beria was a "bloody satrap". Nevertheless, it is impossible to draw an

unambiguous conclusion from Shakhurin's memoirs - to whom exactly, to the head of the Air Force Research Institute or to "one designer", such a dissonant assessment of Beria refers. In any case, it is absolutely certain that from February 3 to July 20, 1941, the NKGB (which was engaged in the search for "high treason") and the NKVD, which was led by Beria, were two different people's commissariats, so for the criminal fabrication of the "case of aviators." Beria answers no more (although, of course, no less) than any other of Stalin's "satraps."

There is no doubt that there were exactly two "fighter designers" who could complain about the general to whom Stalin personally sends wine and fruit "from the royal table": Mikoyan or Yakovlev. The document preserved in the so-called "Special Folders" of the Politburo of the Central Committee of the All-Union Communist Party of Bolsheviks (RGASPI, f. 17, op. 162, d. 34, l. 150) apparently makes it possible to reduce this list to one "designer":

... The head of the Air Force Research Institute, Filin, misled the Central Committee of the All-Union Communist Party of Bolsheviks and the Council of People's Commissars of the USSR ... With his conclusion that the MiG-3 aircraft did not pass the test in range and with his demand for the need to increase the range by 140–180 km (a rare example of

hypocrisy ; unsubstantiated demands to increase the range of all fighters to 1000 km came personally and specifically from Comrade Stalin. - M.S.)

pushed for a further increase in the capacity of gas tanks, i.e., to an even greater overweight of the MiG-3 aircraft and a sharp deterioration in its flight properties ...

The decision to remove Filin from the post of head of the Air Force Research Institute was adopted by the Politburo of the Central Committee on May 6, 1941. The exact date of his arrest is unknown. The decision of the Council of People's Commissars on the Air Force Research Institute was issued on May 27, the order of the NPO to bring the head of the Air Force Research Institute to trial by a military tribunal was issued on May 31, but Beria's memorandum, drawn up in January 1942, indicated May 23.

On May 24, 1941, one of the most important events in the history of the Soviet Union took place. On the evening of that day (from 6:50 pm to 9:20 pm), a meeting of the top command staff of the Armed Forces was held in Stalin's office. Present: People's Commissar of Defense Timoshenko, Chief of the General Staff Zhukov, Chief of the Operations Department of the General Staff Vatutin, the new (after Rychagov) Air Force Commander Zhigarev, the command of the five western military districts in full force. It is noteworthy that out of the entire "inner circle" of party leaders, who visit the Boss's office almost daily, only Molotov was allowed to attend this meeting! After the military left, another man entered the office, to whom Stalin and Molotov devoted a whole hour of their time. It was a little-known (both then and now) to the general public, the head of the department of the Balkan countries of the People's Commissariat for Foreign Affairs, Comrade Lavrishchev. That's all that is known to this day about this event. And one more phrase from Vasilevsky's interview: ***"A few weeks before the attack on us by fascist Germany, unfortunately I can't name the exact date, all the documentation on the district operational plans was handed over by the General Staff to the commands and headquarters of the corresponding military districts ..."*** Nor the minutes of the meeting, neither his agenda has been published. Although, in fact, 64 years have passed since that day, and all the deadlines for declassification established by the law of the Russian Federation have long expired ...

It's hard to tell if this is a coincidence, but after 24 May arrests went one after another.

On May 30, 1941 E.G. was arrested. Shakht, born in 1904, member of the All-Union Communist Party of Bolsheviks since 1926, major general of aviation, assistant commander of the Air Force of the Oryol Military District. Ernst Genrikhovich, a German by nationality, was born in Switzerland. He came to the "homeland of the proletarians of the whole world", at the age of 22 he joined the Bolshevik Party. He trained as a fighter pilot, fought in the skies of Spain, and was awarded the title of Hero of the Soviet Union for his personal courage and skill in

air combat. On the same day, May 30, 1941, People's Commissar of Ammunition I.P. was arrested. Sergeev and his deputy A.K. Khodyakov.

On May 31, 1941, P.I. was arrested. Pumpur, born in 1900, member of the All-Union Communist Party of Bolsheviks since 1919, lieutenant general of aviation, head of the Combat Training Directorate of the Red Army Air Force, then commander of the Air Force of the Moscow Military District. During the war in Spain, Pumpur, the leader of a group of Soviet fighter pilots, was among the very first to be awarded the title of Hero of the Soviet Union, awarded two Orders of Lenin and the Order of the Red

Banner. On June 1, 1941, divisional commander N.N. was arrested. Vasilchenko, born 1896, member VKP(b) since 1918, Assistant Inspector General of the Red Army Air Force.

On June 3, 1941, important organizational decisions were made. The fact is that since the spring of 1941, military counterintelligence was organizationally part of the People's Commissariat of Defense (3rd Directorate of the NPO). This created certain difficulties and delays in the fabrication of "cases". Therefore, on June 3, the Politburo adopts the following Resolution: ***"To satisfy the request of the NKGB that, before the hearing of the Pumpur case in court, this case be transferred to the NKGB for investigation."*** Similar decisions were made later on other arrested persons, thus the "Chekists" were given all the conditions for intensive work.

On June 4, 1941, P.P. was arrested. Yusupov, born in 1894, non-partisan, Major General of Aviation, Deputy Chief of Staff of the Red Army Air Force.

On the same day, June 4, 1941, two heads of departments of the Scientific Testing Range for Aviation Weapons of the Red Army Air Force were arrested: S.G. Onisko, born in 1903, member of the All-Union Communist Party of Bolsheviks since 1923 and V.Ya. Tsilov, born in 1896, member of the All-Union Communist Party of Bolsheviks

since 1918, military engineer of the 1st rank. On June 7, 1941, G.M. was arrested. Stern, born in 1900, member of the All-Union Communist Party of Bolsheviks since 1919, colonel general, head of the USSR Air Defense Directorate. Stern has never been a pilot, he is a regular military man, during the war years in Spain he was the Chief Military Adviser to the Republican government, then he was the chief of staff and commander of the Far Eastern Front. Hero of the Soviet Union, awarded two orders of Lenin, three orders of the Red Banner, the Order of the Red Star.

On the same day, June 7, People's Commissar for Armaments B.L. was arrested. Vannikov (future head of the Soviet Atomic Project). On the

same day, June 7, A.A. Levin, born in 1896, major general of aviation, deputy commander of the Air Force of the Leningrad Military District, was arrested. On June 8,

1941, Ya.V. was arrested. Smushkevich, born in 1902, member of the All-Union Communist Party of Bolsheviks since 1918, lieutenant general of aviation, in 1939–1941. Commander-in-Chief of the Red Army Air Force, then - Inspector General of the Red Army Air Force, Assistant Chief of the General Staff for the Air Force. An outstanding fighter pilot and commander, fought in the skies of Spain and Khalkhin Gol, for exceptional courage and skill twice

He was awarded the title of Hero of the Soviet Union (there were only five twice Heroes in the USSR before the start of the war).

On June 9, 1941 A.D. was arrested. Loktionov, born in 1893, staff captain of the old Russian army, member of the All-Union Communist Party of Bolsheviks since 1921, colonel general. Until 1933, he commanded rifle divisions and the 4th rifle corps. In 1933-1937, Loktionov was assistant commander of the Belarusian and Kharkov military districts for the Air Force, then commander of the Central Asian Military District. In 1938-1940 he is Commander-in-Chief of the Air Force of the Red Army, Deputy People's Commissar of Defense of the USSR, member of the Central Committee of the All-Union Communist Party of Bolsheviks, member of the Main Military Council. The last position before the arrest was the commander of the Baltic Special Military District (until February 1941, then - "at the disposal of the NPO"). He was awarded

two Orders of the Red Banner, the Order of the Red Star. On June 17, 1941, K.M. was arrested. Gusev, born in 1906, member of the All-Union Communist Party of Bolsheviks since 1930, lieutenant general of

aviation, commander of the Air Force of the Belarusian OVO, then the Air Force of the Far Eastern Front. On June 19, 1941, P.A. was arrested. Alekseev, born in 1888, member of the All-Union Communist Party of Bolsheviks since 1920, lieutenant general of aviation, head of

the Main Directorate of Aviation Supply of the Red Army, then assistant head of the Air Force of the Volga Military District. On Sunday, June 22, well-known events began, but they in no way stopped or slowed down the wave of arrests. Moreover, the deadly wave began to

approach the very top of the country's military leadership. On June 24, 1941, the Hero of the Soviet Union, General of the Army, Deputy People's Commissar of Defense (before that - Chief of the General Staff of the Red Army) K.A. was arrested. Meretskov. Just three days before, by decision of the Politburo, he was appointed representative of the Supreme Command of the Red Army on the Northern Front, arrived in Leningrad on June 22 and during this long day led the troops of the district (front), since the commander of the Northern Front was in the North - in Murmansk. On June 23, Meretskov was suddenly summoned to Moscow and arrested (according to one version, right in Stalin's waiting room).

On the same day, June 24, 1941, P.V. was arrested. Rychagov, born in 1911, Air Lieutenant General.

Rychagov became a fighter pilot at the age of 20. In October 1936, as part of the first group of Soviet pilots, he arrived in Spain, until February 1937, the I-15 biplane squadron, commanded by Rychagov, shot down 40 Nazi aircraft, of which 6 aircraft were personally shot down by the squadron commander. On December 31, 1936, the brave pilot and talented commander was awarded the title of Hero of the Soviet Union. From Spain, Rychagov ends up in China, where he is already in the position of commander of the entire Soviet

air group is fighting against the Japanese invaders. On March 8, 1938, he was awarded the Order of the Red Banner, and in April he was appointed commander of the aviation of the Primorsky Group of the Special Red Banner Far Eastern Army. For the successful leadership of the Air Force in the battles near Lake Khasan in 1938 he was awarded the second Order of the Red Banner. In the same year, Rychagov was admitted to the party by the decision of the Central Committee of the All-Union Communist Party of Bolsheviks, without undergoing candidate experience. During the Finnish War, he commanded the Air Force of the 9th Army - the fourth war and the third Order of the Red Banner. From June 1940 he was deputy, and from August 1940 - commander-in-chief of the Red Army Air Force.

On June 26, 1941, the extermination of the leadership of the People's Commissariat of Ammunition continued. Arrested D.A. Irlin, head of the planning department of the People's Commissariat and G.A. Tolstov, head of the supply department of the People's Commissariat of Ammunition.

On the same day, June 26, 1941, A.P. was arrested. Ionov, born in 1894, member of the All-Union Communist Party of Bolsheviks since 1938, major general of aviation, commander of the Air Force of the North-Western Front (Baltic OVO). On

June 27, 1941, P.S. was arrested. Volodin, born in 1900, Major General of Aviation. The first time Volodin (at that time - the chief of staff of the Air Force of the 1st Red Banner Army) was arrested in 1938, then, as part of the "Beria thaw", he was released into the wild in 1939. From April 11, 1941, until the day of his arrest, he was chief of staff of the Red Army Air Force. On the same day, June 27, 1941, I.I. Proskurov, born in 1907, member of

the CPSU (b) since 1927, lieutenant general of aviation. The track record of General Proskurov was unusual even by the standards of that incredible time. In 1931, from the last year of the Kharkov Institute of Electrification, Proskurov was drafted into the Red Army, where he graduated from the 7th flight school and became a heavy bomber crew commander. Then Proskurov serves as an instructor pilot at the elite Air Force Academy. Zhukovsky, commander of a bomber squadron. Among the first, Proskurov arrived in Spain, where he was at the helm of the "SB" fighting the Francoists. In 1937 he was awarded the title Hero of the Soviet Union. After Spain - Commander of the Special Forces Aviation Army of the Far Eastern Front. Awarded the Order of Lenin, two Orders of the Red Banner. On April 14, 1939, a military pilot and aviation commander became the head of the Intelligence Directorate and (according to his position) deputy people's commissar of defense. On July 27, 1941 (exactly one year before his arrest), Proskurov again returned to aviation, where he commanded the Air Force of the Far Eastern Front, later - assistant commander-in-chief of the Air Force for long-range aviation. At the time of his arrest, he was commander of the Air Force of the 7th Army.

On the same day, June 27, 1941, E.S. was arrested. Ptukhin, born in 1902, member of the All-Union Communist Party of Bolsheviks since 1918, lieutenant general of aviation, commander of the Air Force of the South-Western Front (Kyiv OVO). He graduated from the military aviation school in 1929 as a fighter pilot and commander of a fighter aviation brigade. In Spain, he was an adviser to the Republican Air Force, after returning to the Union in 1938, he was appointed commander of the Air Force of the Leningrad Military District. During the Finnish war - the commander of the Air Force of the main, North-Western Front. Hero of the Soviet Union, awarded two Orders of Lenin, the Order of the Red Banner and the Order of the Red Star. In January 1941, Ptukhin was appointed head of the Main Directorate of Air Defense of the Red Army, and then - commander of the Air Force of the Kyiv Special Military District. On

June 28, 1941, F.K. was arrested. Arzhenukhin, born in 1902, member of the CPSU (b) since 1922, lieutenant general of aviation. In 1927 he graduated from the Borisoglebsk school of military pilots, in 1931 he graduated from the advanced training courses for command personnel at the Air Force Academy. Squadron commander, senior inspector for the flight service of the Air Force Inspectorate, chief of staff of the 4th bomber air corps. Assistant military attaché in Spain, 1938–1940 chief of staff of the Air Force of the Red Army, then - head of the Military Academy of command and navigators of the Air Force. He was awarded the Order of Lenin, the Order of the Red Banner.

On July 8, 1941 A.I. was arrested. Tayursky, born in 1900, member of the All-Union Communist Party of Bolsheviks since 1926, Major General of Aviation. Deputy Commander of the Air Force of the Western Front (Western OVO), after the death of the Commander of the Air Force of the Front, took over his duties. On

July 12, 1941, N.A. was arrested. Laskin, born in 1894, non-partisan, Major General of Aviation, Chief of Staff of the Air Force of the Southwestern Front.

In early July 1941 (from July 4 to July 10), a large group of generals from the command of the Western and Northwestern fronts was arrested (commander of the Western Front Pavlov, chief of staff Klimovskikh, head of communications of the front Grigoriev, head of artillery of the front Klich, commander of the 4th Army Korobkov of the Western Front, Commander of the 14th Mechanized Corps Oborin, Chief of Staff of the Northwestern Front Klenov). Among the arrested generals was the commander of the 9th SAD (mixed air division) of the Western Front, a fighter pilot, a participant in the war in Spain, Hero of the Soviet Union S.A. Chernykh. Traditionally (if only this term is applicable to events about which the traditional Soviet historiography tried to remain silent), this series of arrests is associated with Stalin's reaction to the catastrophic defeat of the Western Front. Judging by the documents published over the past 10-15 years, this version does not contain

nothing but the purely psychological effect of the substitution of the concepts **"after"** for **"due to the fact that."**

Arrest of Army General D.G. Pavlov was most likely connected precisely with the "military conspiracy", and not with the fact of the defeat of the Western Front. On June 30, 1941, Pavlov was removed from his post, summoned to Moscow, "scrubbed" there properly, but after that (all in the same rank of army general!) Was sent to fight on the same Western Front. There is information that Pavlov was appointed deputy front commander for armored forces. Not such a big demotion - if we take into account the fact that the people's commissar of defense himself, Marshal Timoshenko, was appointed the new commander of the front. Pavlov was arrested on July 4, right on the road, near the city of Dovsk (30-40 km from the front line, which then passed near the city of Rogachev). From the protocols of interrogations it clearly follows that "conspiratorial ties with Uborevich and Meretskov" were of interest to the "Chekists" much more than finding out the real reasons for the defeat of the Western Front. (119) At the trial, Pavlov renounced the self-incrimination knocked out of him and was sentenced to death for **"inaction of the authorities, incompetence and the collapse of command and control."** But, judging by the pressure of the "investigators", it was a completely different matter - the case of a conspiracy of the highest command staff of the Red Army.

Nothing to do with the investigation of the causes and the search for those responsible for the defeat of Soviet aviation at the beginning of the war is not in the "indictment" against the commanders of the Air Force of the western districts of Ionov, Ptukhin, Tayursky, Laskin. They - in the same way as the aviation generals arrested before June 22 - are "convicted by the testimony" of Belov, Uritsky, Bergolts, Uborevich, who were shot in 1937-38. They are charged with **"participation in a right-wing Trotskyist conspiracy"**, espionage in favor of the almost non-existent ~~Airfield construction sabotage~~ **airfield construction sabotage**. They were recruited into "spies" who in 1938, and who (Ptukhin) and in 1935 ... By the way, the fate of the commander of

the Air Force of the Kiev Regional Military District Ptukhin was decided even before the German invasion. Air Marshal A.A. Novikov (at that time - the commander of the Air Force of the LenVO) writes in his memoirs:

... On June 20, unexpectedly, by order of the people's commissar of defense, Marshal of the Soviet Union S.K. Tymoshenko was summoned to Moscow. On Saturday I returned to Leningrad and immediately telephoned the people's commissariat. General Zlobin, who was with the people's commissar for special assignments, said that I was being transferred to Kiev. Naturally, I immediately thought of General E.S. Ptukhin and inquired where they were transferred.

his. My question remained unanswered. Zlobin somehow hesitated and after a short pause replied that the issue of Ptukhin had not yet been resolved, and I should be at the marshal's at 9 o'clock in the morning on June 23, and hung up ...

(39)

Much is unclear in the circumstances of the suicide of the commander of the Air Force of the Western Front, Major General I.I. Koptsa. He shot himself in his office on June 22, 1941. The generally accepted version of the causes of suicide does not fit the most, in this matter, the main thing:

- personality traits of the deceased. Hero of the Soviet Union, holder of the Order of Lenin and the Order of the Red Banner, a participant in two wars (Spanish and Finnish), 34-year-old General Ivan Kopets was not a "former fighter pilot." Until the last day he remained a flying pilot. Marshal Skripko, in his memoirs, even notes with some disapproval that the district aviation commander spent most of his time at airfields, to which Kopets did not arrive on the ZIS, but flew on the I-16 fighter. Yes, and the title of Hero of the Soviet Union squadron commander I.I. Kopets received not as a gift "for the anniversary", but for personal courage shown in the sky of Madrid. For a person with such a biography and such a character, it would be much more natural to commit suicide - if such an intention actually arose - in the air, in the cockpit of a combat aircraft, taking with him

several enemies. The fighter aircraft was at the personal disposal of the Air Force commander. Everything falls into place if we only assume that the reason for the suicide was not at all the shock from the unsuccessful (which no one knew about at noon on the first day of the war!) The start of hostilities. Most likely, on June 22, 1941, they arrived for the front aviation commander. People with warm hearts arrived, "friends of the people." In this case, the only way to evade the "investigation" and the wrong court was only one bullet in the temple.

This version will not seem so extravagant if you carefully read two passages from the memoirs of G. Zakharov (at that time - the commander of the 43rd IAD of the Western Front):

... It was already dawn for a long time when the call came from the district aviation headquarters. It was, from memory, between five and six in the morning. The district air force commander called: "We are being bombed. There is no communication with Chernykh and Ganichev (commanders of the 9th SAD and 11th SAD).

Kopets spoke in an even voice, and it seemed to me that he spoke too leisurely. I was silent. - Cover Minsk with two shelves. One is Baranovichi. Another one is Pukhovichi. It was an order. I answered properly when the order was understood and accepted. Didn't ask questions. Kopets was silent, although I thought he should say something else. But he only said one word:
- Act.

... I immediately went to the district air force headquarters. In the corridor I met the chief of staff, Colonel S.A. Khudyakov ... I reported on everything that had been done during the day from the moment when I received the order from the commander by telephone. **In turn, he asked about the general**

situation. The situation was unclear. The aviation headquarters had no connection with divisions (*emphasized by the author*)

located near the borders. Despite the far from complete information, one could assume that regiments still existed and were fighting near the border, but there was no connection with them, and, most importantly, it was impossible to gather everything into a fist and establish control ...

On the evening of June 22, Khudyakov and I assumed that the Germans be able to delay. That, in any case, they will not go further than the Minsk fortified area

... After talking with Khudyakov, I went to the commander. Before leaving, just in case, he asked Khudyakov if Kopets was at home. Khudyakov seemed to nod, but something seemed strange to me in his silent answer. I resolutely moved along the corridor - Wait, - Khudyakov stopped me. I turned around. - Ivan Kopets shot

himself ...

(55)

The results of the great work carried out by the "chekists" in less than two months are staggering. Arrested: - Deputy People's

Commissar of Defense, former Chief of the General Staff of the Red Army (Meretskov);
- People's

Commissar for Armaments (Vannikov); -

People's Commissar of Ammunition (Sergeev);

- three former commanders of the Red Army Air Force (Loktionov, Smushkevich, Rychagov); - Head of the Main Directorate of Air Defense of the USSR (Stern); - Assistant Commander-in-Chief of the Air Force for Long-Range Aviation (Proskurov); - Chief of Staff of the Red Army Air Force and his deputy (Volodin and Yusupov); - Commander of the Air Force of the Far Eastern Front (Gusev); - Deputy Commander of the Air Force of the Leningrad Military District (Levin); - Chief of Staff of the North-Western Front (Klenov); - Commander of the Air Force of the North-Western Front (Ionov); - Commander and Chief of Staff of the Western Front (Pavlov and Klimovskikh); - Commander of the Air Force of the Western Front (Tayursky); - Commander of the Air Force and Chief of Staff of the Air Force of the South-Western Front (Ptukhin and Laskin); - Commander of the Air Force of the Moscow Military District (Pumpur); - Assistant Commander of the Air Force of the Oryol Military District (Shakht); - Assistant Commander of the Air Force of the Volga Military District (Alekseev); - Head of the Military Academy of Command and Navigators of the Air Force (Arzhenukhin); - Head of the Air Force Research Institute (Filin); - Head of the NIP of aviation weapons (Shevchenko). The list is, of course, far from complete. It does not even include all those who have been named above. But there were dozens of other commanders, engineers, managers who were arrested and killed as part of the "aviators' case." And at the same time, a grandiose case of an "anti-Soviet conspiracy" was unfolding in the Main Artillery Directorate of the Red Army (deputy head of the Major General G.K. Savchenko, his deputies, designers of artillery systems were arrested and shot).

No one knows why, but Stalin pardoned the two doomed: Vannikov and Meretskoy. On July 20,

Vannikov was returned to his workplace straight from the prison cell. The Chairman of the GKO, Stalin, personally wrote a paper with the following content:

"The GKO certifies that Comrade Vannikov Boris Lvovich was temporarily arrested by the NKVD, as it has now become clear, due to a misunderstanding that Comrade Vannikov is currently considered to be fully rehabilitated. T. Vannikov, by the Decree of the Central Committee of the All-Union Communist Party of Bolsheviks and the Council of People's Commissars of the USSR, was appointed Deputy People's Commissar for Armaments and, by order of the State Defense Committee, must immediately begin work as Deputy People's Commissar

A little later, Vannikov was appointed People's Commissar of Ammunition of the USSR. He served faithfully, and when the time came to create for Comrade Stalin "ammunition" of unprecedented destructive power - an atomic and then a hydrogen bomb, then Vannikov, who had previously been arrested by the NKVD, was entrusted with this business, "as it has now been clarified, due to a misunderstanding" . Vannikov coped with the task, brought the matter to the test of "ammunition" with a capacity of 50 megatons and became three times Hero of Socialist Labor.

Meretskov was released at the beginning of September 1941 and was immediately appointed representative of the Headquarters of the Supreme High Command in the North-Western and Karelian fronts, then commander

of the 7th separate army. After being tortured in the cellars of the NKGB, Meretskov's health was severely undermined (they say that caring Stalin even allowed him to report while sitting), and Meretskov did not find the laurels of an outstanding commander ...

All the rest who survived and lived to see the execution were shot. Shot in "four calls". On July 22, 1941, exactly one month after the start of the war, Pavlov and his colleagues were shot. On October 16, 1941, the rest of the army generals arrested in July were shot; Chernykh also died in this group. On October 28, without any verdict, after the flight of the NKVD apparatus from Moscow to Kuibyshev, Loktionov, Stern, Arzhenukhin, Rychagov, Smushkevich, Proskurov, Savchenko, Volodin were shot on the outskirts of the "reserve capital". The fate of the largest group of those arrested was decided on January 29, 1942. Stalin wrote on a memorandum

from the People's Commissar of the NKVD Beria: **"Shoot all those named on the list."** February 13, 1942. A special meeting of the NKVD of the USSR issued a decree on execution. Young, thirty- and forty-year-old generals who signed up for the Bolshevik Leninist Party at the age of 18-20 were shot on February 23, 1942. On the day of the Red Army. Many, many years have passed since then. In Kuibyshev, a park appeared on the site of the execution site of the NKVD. Children's Park named after Gagarin. At the beginning of the

"perestroika", a memorial stone was placed on the site of the future monument to the martyr heroes. They read speeches, invited relatives of the dead. Now the stone is up to half in the grass, however, the grass will be born there, good, tall and beautiful. With wildflowers.

Chapter

20 AT THE LINE

The Stalinist regime achieved the utmost mobilization of the raw materials, labor, and intellectual resources of a huge country, as a result of which the Soviet Union produced on the eve and during the war cyclopean mountains of weapons of all sorts and types. It would seem that it was precisely this achievement that the party "historians-propagandists" should have trumpeted at all corners, but everything was exactly the opposite: having invented an illusory "monolithic unity of society", they stubbornly denied the real achievements of Comrade Stalin in creating the largest in numbers and armament armies of the world. The reason for such a chronic "strabismus" is quite understandable - it was necessary to somehow explain the catastrophic defeat of this army at the beginning of the war with Germany ...

As a result, even today (these lines are being written at the beginning of 2009), school history textbooks continue to replicate the myth of "the enemy's multiple numerical superiority", and any publication of real figures known to specialists for a long time is perceived as "scandalous" (if not "slandorous"). I hasten to warn you again - there will be no sensations in this chapter either. The reader will have to get acquainted with a brief overview of those facts and documents that were declassified and introduced into open scientific circulation at least 10-15 years ago. (3, 4, 6, 9, 10, 11, 16, 23, 35, 61, 68)

The war unfolds in time and space. This - so trivial and boring - circumstance opens up enormous opportunities for shameless juggling of facts.

What is "air force"? What does "number of combat aircraft" mean? Number on what day? Or for what period? Number where: in the whole country? or in the grouping that was deployed in a particular theater? And what is "combat aircraft"? Are these fighters and bombers in combat units? Or all (including flight schools and test sites) fighters and bombers? Or all aircraft of any type, which, according to the statements, are on the balance sheet of the Air Force? Or in general, all flying objects with identification marks (red star or black cross) on the wings? Thus, any assessment of the balance of power of the parties must begin with a clear definition of terms and methods of calculation. How

It is known that combat aircraft do not fly in flocks, and military aviation does not consist of aircraft, but of units and formations. It is the number of air units deployed in the theater and the number of crews in them that determines what should be called "aviation strength". The quantity of "consumables" (i.e. aircraft) should also be taken into account, but only as additional information. We will immediately explain to the incredulous reader who is expecting a "trick" that such a technique will lead not to an increase, but to a significant decrease in the estimate of the number of Soviet aviation (on the eve of the war, many fighter regiments of the Soviet Air Force had one and a half to two times more aircraft than pilots).

Calculations are further complicated by the fact that the units and formations of the Luftwaffe and the Soviet Air Force had a different structure and strength. The main tactical unit of Soviet aviation was an aviation regiment. Before the war, according to the current staffing table, the Soviet air regiment consisted of five squadrons of 12 crews each and a command level, a total of 62–64 crews. Fighter (IAP), bomber (BAP), assault (SHAP) and reconnaissance (RAP) air regiments were formed in the Soviet Air Force. Sometimes the name of the bomber regiments indicated their functional purpose: long-range bomber (DBAP), high-speed bomber (SBAP). Several regiments (from 3 to 5) were combined into an air division: fighter (IAD), bomber (BAD), mixed (SAD). Assault air regiments on the eve of the war were part of the SADs. Reconnaissance air regiments, as a rule, were not part of air divisions, reporting directly to the command of the fronts (one or two RAPs per front / district). The aviation of the Navy had its own specific structure. There were no air

divisions, two regiments were combined into an air brigade (fighter - IABR, bomber - BABR); along with the air regiments, there were many separate air squadrons. There was also such an extremely rare structure in "land aviation" as a SAP (a mixed air regiment, which included fighter, bomber and assault squadrons). Another feature of naval aviation was the presence of mine-torpedo aviation regiments (MTAP), which were a bomber regiment with aircraft equipped for the use of aviation torpedoes and mines, and specially trained crews. As for the fighter and bomber units and units of the Navy Air Force, they were armed with conventional, "land" aircraft: "I-16", "I-153", "MiG-3", "DB-3f", "SB ", "Ar-2". It would not be an exaggeration to say that naval aviation in all countries (and the Soviet Union was no exception) is the elite of the Armed Forces.

Force. The reason is simple: "the sea does not forgive." In the event of a loss of orientation or engine failure, neither the I-16 nor the DB-3 will be able to make an emergency landing on the water. And a parachute over the sea does not help much - a person does not live long in the icy waves of the winter Baltic or the Barents Sea. The very first mistake for the crew of naval aviation may be the last. That is why there are no weak pilots in the aviation of the Navy. It is probably no coincidence that the first (and at the same time successful - in contrast to the shameful failure of Operation 81 DBAD) raid on Berlin was carried out by pilots of the 1st MTAP of the Baltic Fleet Air Force, and one of the best fighter regiments at the beginning of the war was the 13th IAP (future 4th Guards) from the Air Force of the Baltic Fleet. The only thing that is difficult to understand is why the Soviet "historians" always forgot to even mention the aviation of the Navy when assessing the total strength of the Soviet aviation group ... The main tactical unit of the Luftwaffe was the aviation group. The Luftwaffe air group included only three squadrons ("staffels") of 12 crews and a headquarters link, a total of 40 crews. Thus, in terms of the number of squadrons, three Soviet air regiments were equal to five Luftwaffe groups. The formation of the Luftwaffe, similar to the Soviet air division, was called a squadron. As a rule, each squadron consisted of three groups. The following designations

are accepted in the military literature: JG (fighter), KG (bomber), StG (assault) squadron. Units, fighter-bombers "Me-110", were designated as ZG ("destroyers") or SKG ("high-speed bombers"). If in Soviet aviation each regiment had its own "personal" number (for example, 123 IAP, 40 BAP), then in the Luftwaffe the air group was designated as an integral part of its squadron. For example, II / KG-53 is the second group of the 53rd bomber squadron. Within the same air group, staffels (squadrons) had continuous numbering, traditionally indicated by Arabic numerals. So, for example, 5. / JG-53 is the fifth staffel of the 53rd fighter squadron, which is part of the second group of this squadron, i.e., part of II / JG-53. Several squadrons of the Luftwaffe (from 4 to 6) were reduced to an aviation corps (AK). The highest organizational structure of the Luftwaffe was the Air Fleet, which, as a rule, included two air corps. Before the equipped multipurpose twin-engine start of the war in Soviet aviation, the corps link existed only in long-range bomber aviation (two bomber divisions in each of the five DBACs). Three days before the start of hostilities, on June 19, 1941, it was decided to deploy three air defense fighter corps (6th in Moscow, 7th in Leningrad and 8th in Baku), and there should not have been divisions in these corps

be, and the 10-12 fighter regiments that were part of the corps were directly subordinate to the command of the corps and the air defense zone.

It is also worth noting that the military aviation of Nazi Germany was a single centralized structure, and the Luftwaffe organizationally included not only all aviation units, but also the ground air defense infrastructure (anti-aircraft artillery, searchlight units, etc.). On the contrary, in the Armed Forces of the USSR, there were, in fact, several different "aviations": - front-line aviation, units and formations of which were in

subordination of commanders of combined arms armies and fronts;

- long-range bomber aviation, which was subordinate to directly to the High Command of the Red Army;

- independent aviation of the Navy. Air defense aviation also began to form. In the following, fighter, bomber, assault air units (IAPs, BAPs, ShAPs in the Soviet Air Force, JG, KG, StG, ZG and SKG in the Luftwaffe) will be classified as "combat aviation". Accordingly, all reconnaissance, communications, transport, and air ambulances are excluded from accounting. Such a technique will lead to a decrease in the estimate of the number of enemy aircraft compared to that which was traditionally adopted in Soviet historiography, where party "historians" easily and naturally piled 12-ton "Junkers" and light-engine aircraft and auxiliary aircraft into one pile (to make that for some reason they forgot the forgery in relation to the Soviet Air Force). And since there are always a lot of light-engine aircraft in quantity, then the numbers can be obtained to your heart's content (it's like writing: "There are two horses, one bull, two cows and 30 sheep on the farm of peasant Pupkin, and a total of 35 head of cattle "). Such a trick was especially "effective" for inflating the number of aviation allies of Germany (Slovakia, Croatia, Hungary, Romania).

The air forces of these backward agrarian countries, along with a few units of more or less modern combat aircraft, were in a considerable amount of hopelessly outdated trash, bought for a pittance from wealthy neighbors and suitable - at best - for initial pilot training.

Another problem that arises in assessing the real strength of the Soviet Air Force is the presence of a large number of new formations that are being formed. If the combat strength of the Luftwaffe for a number of years was approximately constant (for example, from July 1940 to January 1942 there was no

not a single new group of day fighters was formed), then the Soviet Air Force grew continuously and rapidly. A year before the

war, on June 1, 1940, there were 188 air regiments in the Armed Forces of the USSR. On October 23, 1940, People's Commissar of Defense Tymoshenko reported to Stalin, and already on November 5, the Politburo approved a program to further strengthen military aviation: by January 1, 1941, it was to be increased to 239 air regiments (of which 96 were fighter) with 14,108 combat aircraft. But on January 1, the year is just beginning, by the end of 1941, it was planned to bring the combat strength of aviation to a fantastic figure of 343 air regiments (including 149 fighter, 22 regiments of long-range twin-engine escort fighters, 144 bombers, including 36 long-range ones), in service which should have been 22171 aircraft (RGASPI, f.17, op.162, d.30, l.39). The total aircraft fleet of the Soviet Air

Force (including training, transport, sanitary, etc.) was planned to be increased to 32,432 units by the end of the year. Poor Churchill! On September 1, 1941, he

wrote to the Chief of Staff of the Royal Air Force: ***"I was delighted to learn from the latest report that the air forces of the metropolis have actually one hundred fighter squadrons ..."*** By the standards of Comrade Stalin, such a trifle was only enough to form 20 fighter regiments ...

What stage did the implementation of such grandiose plans reach by June 22, 1941? Apparently no one knows the exact answer. Signed by Vatutin (Chief of the Operations Directorate of the General Staff of the Red Army) on June 13, 1941, "A certificate on the deployment of the Armed Forces of the USSR in the event of a war in the West" reports the presence of ***"a total of 218 combat-ready air regiments, of which: IAP - 97, BAP - PO, ShAP - 11"***. But already in the next paragraph, where the distribution of these forces to the fronts is indicated (it is this term - "front" - that is used in the text of June 13), the summation leads to the number of 225 air regiments. The well-known "Considerations on the Plan of Strategic Deployment" of May 1941 mention the same figure - 218 air regiments ***"available and combat-ready today"***. The authors of the monograph "1941 - Lessons and Conclusions" argue that by June 1, 1941, there were already 266 air regiments in service.

In any case, there could not be any insoluble problems with the armament of the forming units, since with a full staff strength of the air regiment of 62–64 aircraft, "only" 21 thousand aircraft were required to equip 333 air regiments, but as of June 22, 1941, there were 20,000 combat aircraft (including 11,500 fighters), and factories continued to work hard in three shifts each

day. It is worth noting that the last two figures are taken from the most conservative (in the good sense of the word) source - the statistical collection "Secret Classification Removed", released in 1993 by the scientific and historical service of the General Staff of the Russian Federation.

Let us now turn to the definition of the geographical boundaries of the theater of operations. In relation to the events of the first weeks of the Soviet-German war, the theater of operations should be understood as the territory of the five western military districts (Leningrad Military District, Baltic OBO, Western OVO, Kiev OVO and Odessa Military District), or, in more familiar and understandable terms, the territory of the Murmansk region and Karelia, Estonia, Latvia, Lithuania, Belarus, right-bank Ukraine, Moldova and Crimea.

In the sky above this theater in the first weeks of the war, in fact, they acted: - from Germany: the 1st, 2nd, 4th Luftwaffe Air Fleet and some units of the 5th Air Fleet (in the Arctic); Romanian and Finnish aviation;

- from the side of Soviet aviation: Air Force of five military districts (fronts), aviation of the Northern, Baltic and Black Sea fleets, long-range aviation formations (1st DBAC in the Novgorod region, 3rd DBAC in the Smolensk region, 2nd DBAC in the Kursk region, 4th DBAK in the Zaporozhye region).

In order to make further comparison with the enemy aviation grouping more correct, the entire theater of operations will be divided into three lanes: "North" (Karelia and the Baltic States), "Center" (Belarus) and "South" (Ukraine, Moldova, Crimea) - in accordance with the division of the invasion forces into army groups "North", "Center", "South". The composition of the Soviet aviation grouping (units

and formations, crews, aircraft) is presented in Appendixes 1 and 2. Based on the information presented there (not taking into account the assault air regiments armed with obsolete I-15 bis biplanes and TBAPs armed with obsolete slow-moving TB-3s), we will build the following table: Table 17

	Fighters	Bombers	
	squadron	regiments	squadron regiments 65 9
Air Force LenVO 13	45		
Air Force PribOVO 8	40	8	40
"Sever" Air Force KBf and S.f. 4	23	3	16
1st DBAC — — 25 128		5	25
Total:		25	126
"Center" Air Force ZapOVO 12	60	12	60

	3rd DBAK — — 12 60		4	20
	Total:		16	80
	Air Force KOVO 20	100	13	65
	Air Force OIVO 7	35	5	25
"South"	4th DBAK - - Air Force Ch.f. 18		6	thirty
		3	2	12
	Total:	thirty 153	26	132
TOTAL:		67 341	67	338

So, the grouping of the Soviet Air Force consisted of 134 air regiments, 679 squadrons (excluding fleet aviation - 122 regiments and 610 squadrons). And this estimate is by no means overstated. Almost all, including quite "solid" studies, give large numbers. So, historians from the General Staff, the authors of the monograph "1941 - Lessons and Conclusions" report that ***"the grouping of the Soviet Air Force at the western border of the USSR included 130 air regiments"*** (and this is without taking into account the Navy Air Force!). A.G. Khorkov, the author of the monograph "The Tragedy and the Feat of the Border District Troops" published by Voenizdat back in Soviet 1991, counted 133 air regiments in the Air Force of five western districts on page 225. In the monograph by VS Shumikhin, published already in 1986, the number of air forces of the districts (excluding the regiments of the DBA and the Air Force of the Navy) was determined at 119 air regiments.

Be that as it may, 134 regiments accounted for slightly more than half (!) Of the total number of combat-ready air regiments. Such a situation, on the one hand, allowed the Germans to "hit the enemy in parts" (however, it must be borne in mind that any of these "units" was three times superior, as will be shown below, to the entire Luftwaffe grouping). On the other hand, with such a deployment, the notorious "destruction of Soviet aviation at border airfields" could not even be hypothetically possible - only units of the Air Force of four western districts (and this is about 90 air regiments) could become the object of the first "disarming" strike on the morning of June 22. Not to mention the fact that on June 22, 1941, many of these 90 regiments were based hundreds of kilometers from the border, and not a single bomb fell on their airfields ...

Now let's move on to accounting for the main component of combat aviation - determining the number of flight crews. And in this case, there is a scatter of data even within one statistical collection (see Appendix 2). The Soviet Air Force grew rapidly, re-equipped with new types of aircraft; accordingly, the process of relocation and retraining of flight crews was ongoing. The following table 18 is made up of rounded (so as not to create the illusion of non-existent accuracy) and arithmetically averaged numbers

from Appendix 2. To maintain uniformity of accounting, the crews of 18 DBAD were taken into account in the strength of the Kiev OVO Air Force (in fact, it was so - the division was transferred to the operational subordination of the district / front air force command in the very first days of the war). The number of combat-ready crews of the Navy Air Force is not indicated in sources known to the author. Conditionally accepting the same ratio between the number of aircraft and pilots (1.25 to 1) as in front-line aviation, we arrive at the following estimate of the number of Soviet aviation crews in the Western theater: Table 18

	Fighters	Bombers	Total
Air Force LenVO 650		400	
Air Force PribOVO		380	
400 "Sever" Air Force KBf and		150	
S.f. 280 1st DBAK -		150	
Total:	1330	1080	2410
VVS ZapOVO 610		490	
"Center" 3rd DBAK - 610		170	
Total:		660	1270
Air Force KOVO 900		650	
Air Force OdVO 390		180	
"South" 4th DBAK - Air Force		370	
Ch.f. 250		110	
Total:	1540	1310	2850
TOTAL:	3480	3050	6530

So, let's sum up the first results. The grouping of Soviet aviation in the theater of war, which began on the morning of June 22, 1941, consisted of 134 air regiments, 679 squadrons, which included about 6.5 thousand flight crews, including about 3.5 thousand fighter pilots. Is it a lot or a little? Everything is relative.

The first in importance

is, of course, a comparison with the number of enemy aircraft. Then we will evaluate the grouping of the Soviet Air Force and in comparison with the aviation of the Western Allies, which in May and August 1940 entered into fierce air battles with the Luftwaffe. The general composition of the Luftwaffe grouping on the Eastern Front is presented in Appendix 3.

We will solve the issue of selecting "forming regiments" in German aviation with the utmost simplicity: we will consider all Luftwaffe air groups to be fully combat-ready. Even such as II / JG-77,

III / JG-27, I / StG-2, II / KG-53, III / KG-3, II / KG-4, I / ZG-26 and many others who arrived on the Eastern Front with less than half of the number of serviceable aircraft. Some difficulties arise with determining the number of combat-ready crews - in most sources known to the author, only information is given on the number of available and serviceable aircraft in each group, but without indicating the number of crews. Some information is available only for fighter squadrons. So, in the JG-54 squadron (1st Air Force) on the morning of June 22, 1941, there were 129 aircraft (including faulty ones) and 112 pilots (the number of pilots is 85% of the total number of aircraft). Data are also known for all formations of single-engine Luftwaffe fighters, but for other calendar dates of the 40th and 41st years (respectively, the number of pilots was 75.6%, 81.8%, 87.4%, 89.8% of the total number of aircraft, including defective machines). With sufficient accuracy for a reliable assessment, we will accept (with some "margin" towards increasing the number of combat-ready crews of the Luftwaffe) that the number of crews is equal to 90% of the total number of aircraft (note that to estimate the number of crews of Soviet naval aviation, we took a smaller figure - 80%).

The results are presented in Table 19. For ease of comparison with the Soviet Air Force, only the number of squadrons (staffels) is indicated. The Ju-87 dive bombers and the corresponding groups and staffs are included in the total number of bombers. The SKG, a group of "high-speed bombers" armed with multi-purpose Me-110s, also belongs to the same category. Two other Me-110 groups are included in the fighter aviation. A unit of six Me-110s of the 5th Air Fleet is accounted for as one fighter squadron. Table 19

		Fighters		Bombers	
		squadron	crews	squadron	crews
		13 31			
"North"	1st Air. fleet	165		290	
"Center"	2nd Air. Fleet 36 4th V.	430	50	580	
"South"	Fleet, 5th AC 9 4th V.	100	24	220	
	Fleet, 4th AC 12 70	150	12	100	
	Total:	845	117	1190	

Thus, the entire Luftwaffe grouping on the Eastern Front consisted of 187 squadrons (staffels) and about 2.0 thousand combat-ready crews. In terms of the number of squadrons

- 3.6 times less than in the opposing grouping of the Soviet Air Force; in terms of the number of crews - 3.2 times less. By

the number of fighter pilots in Soviet aviation is four times superior (3480 against 845).

All of these are average numbers. Like any "average temperature in the hospital", they mask many important aspects of the case. For reasons, the discussion of which is far beyond the scope of this book, the Soviet command concentrated the most powerful grouping of troops in Ukraine, in the zone of the future Southwestern Front, while the enemy struck the main blow in Belarus. As a result, in the offensive zone of the Wehrmacht Army Group Center, an exceptionally unfavorable balance of forces for the Soviet Air Force developed: the most powerful Luftwaffe grouping against the weakest Soviet aviation grouping. But even in this direction, the numerical superiority by the beginning of hostilities was on the side of Soviet aviation (for fighters 1.42 to 1, for bomber crews 1.14 to 1). On the northern and southern flanks of the war, Soviet aviation had, without exaggeration, an overwhelming numerical superiority. In the offensive zone of the Wehrmacht Army Group "North", the ratio of the number of fighters is 8 to 1, the crews of bombers - 3.7 to 1. In the sky over Ukraine, a hundred fighters of a single JG-3

squadron were opposed by the KOVO Air Force, which included about 900 pilots fighters; the Soviet Air Force outnumbered the enemy 9 times in fighters, 4.6 times in bomber crews. Let us recall once again that these figures were obtained on the basis of a clearly underestimated (the so-called "forming regiments" were not taken into account, all ground attack and heavy bomber regiments without exception were not taken into account) estimates of the number of Soviet aviation. Let us remind you once again that the calculation was made according to the number of crews (!), and not aircraft (there were significantly more aircraft in the air forces of the districts than crews). Now let's look at the situation from the other side, the Anglo-French side. As noted above, French fighters in May 1940 and RAF fighters in August 1940 met with a much more powerful Luftwaffe grouping than the one that was created in June 1941 on the Eastern Front (see Table 20). At the same time, a comparison of the strength of the fighter aircraft of the Soviet Union with the fighter aircraft of the Western allies makes one recall Gulliver in the land of the Lilliputians (see Table 21).
Table 20

May 10, 1940

aircraft /

**August 13,
1940**

aircraft /

June 22, 1941

aircraft /

	groups	groups	groups
Bombers 1736 / 40 Dive-bombers		1482 / 42	930 / 29
"Ju 87"	360/9	365/9	306/8
Fighters Bf-109 1226 / 27		976/26	923/22
Multipurpose "Me 110"	319/9	244/9	185/4
TOTAL:	3641 / 85	3067 / 86	2253 / 63

Table 21

	Squadrons Airmen	
Fighters of France, Holland, RAF Expeditionary Force, May 1940. Fighters of the Royal British Air Force, August 1940.	50	700
	52	650
Soviet fighters of the western districts and fleets, June 1941	341	3480

The above generally accepted methodology for assessing the balance of forces of the parties according to the "instant photograph" on June 22, 1941 significantly underestimates the real power of the "wall" against which German aircraft were supposed to crash. The fact is that on the Eastern Front the Luftwaffe fought all summer in an almost unchanged composition, and this is no coincidence. From May 1940 to June 1941, the general military-political situation changed radically. Now the Luftwaffe was fighting in the spaces from North Africa to the north of Norway, from Brest on the Bug to Brest on the Atlantic coast of France. By a strange coincidence, on June 21, 1941, the British carried out two massive raids according to the "Circus" scheme, when more than 300 fighters and bombers participated in one sortie. To counter the ever-increasing attacks of the Royal Air Force, the Germans concentrated 6 fighter air groups on the coast of Belgium and France. Another 10 air groups for various purposes fought in the Mediterranean theater of operations, 5 groups - in Norway, and the air defense system of Germany itself was already beginning to require the concentration of significant forces. As a result, by June 22, 1941, about 40% of the available aircraft and aviation groups of the Luftwaffe were not on the Eastern Front.

At the same time, the grouping of the Soviet Air Force was constantly growing - both due to the transfer of large aviation formations from the internal and Far Eastern districts to the west, and as a result of the German advance to the east. This question - for obvious reasons - is almost not developed in Russian historiography. Only sometimes there are brief

mention that ***“in June 1941, two mixed air divisions were relocated from the Air Force of the Moscow Military District to the Western and Southwestern Fronts, and one fighter and one mixed air division from Transbaikalia and the Far East.”*** (27) Four air divisions are at least 12 regiments and about 700 crews. By dwarf standards, the Luftwaffe is a whole “Air Fleet”, which arrived at the front in just one week after the outbreak of hostilities. The monograph by I.V. Timokhovitch reports that in five weeks (until the end of July) 15 air divisions arrived at the western theater of operations from the internal and Far Eastern districts. (30) Exactly one month after the start of the war, an air battle

began in the sky over Moscow. As stated in the monograph dedicated to this battle, ***“The command of the Nazi air forces concentrated a specially created aviation group consisting of the 3rd, 28th, 53rd, 54th and 55th bomber squadrons and the 100th bomber group ... To make the largest number of flights to Moscow, fascist squadrons were relocated to the captured airfields of Minsk, Bobruisk, Orsha, Vitebsk and others. The aviation group had more than 300 bombers.”*** (41)

Of the five squadrons listed above, four were already on the Eastern Front from the very first days of the war. Their concentration in the central sector of the front meant the exposure of other sectors according to the “Trishka caftan” method. Really new, transferred to the Eastern Front from Western Europe, were the 28th squadron and the 100th group. But even taking into account the additional number of these units, “the aviation group had only 300 bombers,” that is, less than it was in the 3, 53, 54, 55 squadrons before the start of hostilities (354 aircraft). At the same time, the 6th Air Defense Air Corps at that time had 11 new fighter regiments, not exhausted by previous battles, which were armed with 585 fighters, including 265 MiG-3 and Yak-1 aircraft. These figures are taken from the monograph by A.G. Fedorov, published for the first time in 1972. No “democrats” had time to put a hand to this ...

A few words should also be said about the aviation of Germany's allies. Of course, the Finnish, Hungarian and Romanian Air Forces could not have any significant effect on the balance of forces of the parties and the course of hostilities, especially since they had to operate in those sectors of the common front where the numerical superiority of Soviet aviation was enormous. However, they should not be completely discounted. As part of the aviation of these countries (except for several hundred antediluvian training and reconnaissance vehicles,

which Soviet "historians" always added with great pleasure to the strength of the Luftwaffe) there were also quite combat-ready units. First of all, this applies to the Finnish Air Force, whose pilots have accumulated considerable combat experience during the three months of fierce air battles of the "winter war". Finnish fighters with a total number of about 150 aircraft took part in the fighting in the skies of Karelia. They were armed with Dutch Fokkers, French Morans, American Hawks and Brewsters, Italian Fiats. In a word - quite worthy cars of the late 30s.

The largest was the Romanian Air Force. During the year, from the summer of 1940, Germany made significant efforts to rearm the aviation of its new ally and train Romanian pilots. As a result, by June 22, the Romanian Air Force had 8 fighter squadrons and 11 bomber squadrons. There are about 200 aircraft in total, including such quite modern (for the beginning of World War II) aircraft as the German He-111 bomber, the Italian three-engine SM-79, the German He-112 fighter (an unsuccessful competitor of the Messer in the 1936 competition years) and even a dozen English "Hurricanes" (which Romania managed to buy even before it went over to the side of Germany). In general, it can be assumed that Allied aviation increased the combat potential of the Luftwaffe by 10–15 percent.

The above figures provide a clear and convincing answer to the favorite question of Soviet historians: "Why didn't Stalin believe intelligence?" This amazing question is based on two, not explicitly formulated, theses: it is assumed that "intelligence" reported to Stalin something terribly terrible, but Stalin did not do something necessary "for the defense of the country." In fact, everything was much simpler. On Stalin's desk lay reports from which it followed that the Luftwaffe grouping near the western borders of the Soviet Union had not yet reached 2/3 of the one that was assembled on May 10, 1940 on the 300-km section of the front for the invasion of Belgium and France. And what conclusions should be drawn from this information? Could the cautious and prudent Stalin believe that the Germans would risk advancing into the depths of an endless country without a firm air superiority? According to all the canons of military science, an offensive requires numerical superiority. Preferably two or three times. How can the Luftwaffe win air supremacy, yielding to Soviet aviation four times in the number of fighters? However, unlike other

contemporary authors, let's not pretend to be a "privy adviser to the leader." What Stalin thought is a mystery. But here's how

the commanders of the Red Army perceived the first hours of the German air offensive, it is known for sure. ***“The enemy has not yet brought into action significant air force forces, limiting himself to the action of individual groups and single aircraft ...”*** (61) These are the lines from the report of the headquarters of the Northwestern Front No. 3, signed at 12 noon on June 22, 1941. The assessment is quite understandable, given that the actual number of serviceable combat vehicles (341 aircraft) in the 1st Air Force of the Luftwaffe turned out to be almost ten times less than what the top leadership of the Red Army expected to see in this direction. At least at the entrance of the famous operational-strategic "game" conducted by the General Staff of the Red Army in January 1941, 3,000 aircraft supported the "western" ones from the air in the Baltic direction. (121)

What Stalin himself planned, having for some reason gathered a huge aviation group near the western borders of his empire, we do not know for sure. Documents that can finally confirm or refute the existing hypotheses are still classified. Unless they were destroyed, at the latest - in October 1941, on the eve of the flight from Moscow ... Only a small and, strictly speaking, insignificant fragment of the Big Plan is known in detail - a plan to cover the mobilization, concentration and operational deployment of troops of the western military districts. Once again, let's clarify and emphasize with a thick red line: the cover plan is just part of the operational plan. This is a plan of action - defensive in its essence - for those few days that the troops of the District needed in order to turn into full-fledged, equipped "for the campaign and battle" troops of the front. But even at this preparatory stage of action, an extremely "active defense" was planned. In particular, according to the plan to cover the Western OBO (future Western

Front in Belarus) Front Air Force had to solve the following tasks:

- a) successive strikes by combat aircraft on established bases and airfields of the enemy, as well as combat operations in the air, to destroy enemy aircraft and from the very first days of the war to gain air supremacy
- b) fighter aircraft, in close cooperation with the entire air defense system of the district, firmly cover mobilization and concentration troops ... and prevent enemy aircraft from flying through the territory of the district ...
- d) powerful, systematic strikes on large railway bridges and junctions: Königsberg, Marienburg (***Malbork***), Allenstein (***Olshtyn***), Thorn, Lodz, Warsaw, and

also, by groupings of troops, disrupt and delay the concentration of enemy troops ... Based on the tasks and the

presence of a bomber

aviation, parts of the district air force can solve the following tasks:

a) inflict a simultaneous strike on the established enemy airfields and bases located in the first zone, up to the line of Insterburg (**Chernyakhovsk**), Allenstein, Mlawa, Warsaw, Demblin, covering the actions of bomber aircraft with fighter aircraft. To accomplish this task, 138 links will be required,

we have 142 links, i.e., using all available bomber aircraft, we can solve this problem at the same time;

b) with the second sortie of bomber aircraft, strike at enemy airfields and bases located in the second zone up to the Königsberg, Marienburg, Torun, Lodz line (**200-250 km from the border**. - M.S.). For this purpose, aircraft such as "SB", "Pe", AR-2, of which we have 122 links, can be used, 132 links are required to solve this problem, 10 links are missing

c) ... only Pe-2 and AR-2 aircraft can be used to strike railway / road bridges, which can carry out dive bombing ... Due to the fact that we have few dive bombers, it is necessary to take only the main bridges for destruction (**through the Vistula**. - M.S.), such as: in Torun, Warsaw and Demblin ...

The most remarkable thing in this text is not even that it was planned to start hostilities before the enemy fires the first shot, moreover, before the enemy finishes concentrating his forces (how else can one "disrupt and delay the concentration of enemy troops"?), But twice repeated phrase about "established airfields and bases of the enemy." Yes, and with a specific calculation of the order of forces necessary for their destruction. Against this background, the stories about the fact that our aviation, obeying the mythical "Stalin's ban", only timidly and timidly looked at the reconnaissance flights of German aircraft, look somehow strange, and at the same time on the adjacent territory - not with a foot (or better, not with a wing).). The self-critical assessment of a small number of dive-bombers, forcing one to confine oneself to "destroying only the main bridges," is quite understandable today - the main attack was planned not from Belarus, but from the territory of the Lvov ledge in Ukraine in

direction Krakow - Katowice; the main forces of the Soviet bomber aviation were concentrated there.

Could the commander of the troops of the Western OBO, General of the Army Pavlov, imagine in his worst nightmare that just a week after the start of the war, the remnants of the aviation of the Western Front would unsuccessfully try to destroy bridges and crossings - but not on the Vistula near Warsaw, but near Rogachev on the Dnieper ...

Chapter

21 Airplanes and People

Let us now turn to a brief review of the aircraft fleet of the opposing sides. By the time the hostilities

began, the 1st, 2nd, 4th Air Forces of the Luftwaffe were armed with about 2250 combat aircraft. In principle, it is impossible to give an exact figure - aircraft in the Air Force are expendable material that arrives, departs, deteriorates, is repaired, transferred from the balance of one structure to the balance of another ... And all this happens during a war, the very nature of which does not imply the possibility of keeping records like accepted in a modern computerized warehouse. Available sources allow us to estimate the number of serviceable - by the morning of June 22, 1941 - Luftwaffe combat aircraft at 1760 units (78% of their total number). If we compare the number of combat-ready aircraft with a staffing strength of 187 squadrons (staffels) and 63 headquarters units (a total of 2496 aircraft), then the percentage of serviceable combat vehicles available will drop to 7%. And this is not surprising - many air groups, especially fighter and dive groups, arrived on the Eastern Front straight from the heat of air battles in the Mediterranean theater (the Balkans, Crete). Unlike many other "consumables of war," aircraft are capable of moving on their own. Fast and long

distances. From the northern flank of the Eastern Front (Riga) to the southern flank (Odessa), a bomber plane could fly without intermediate landings (only 1,400 km in a straight line) in 4 hours. Yes, a fighter jet would need to make one or two stops when flying over such a distance, but the light day in June lasts about 18 hours, so that the plane could arrive at its destination by evening. The carrying capacity of the sky, unlike bridges and railways, is close to infinity. The huge strip of Pripyat swamps stretching 300–350 km inland, which divided the theater of operations into two almost isolated regions in the first weeks of the war, practically did not interfere with the relocation of aircraft. That is why, having indicated in the previous chapter the distribution of aviation units and formations in separate sections of the theater of operations, we will not do the same with regard to "consumables", and the number of aircraft of different types will be given only in summary form.

The grouping of Soviet aviation, the composition of which was described in detail in the previous chapter, was armed with about 8250 combat aircraft (fighters and bombers). In comparison with the enemy's aircraft fleet - almost fourfold superiority (3.7 to 1). About 84-87% of them were (as of June 1, 1941) in good, combat-ready condition. 85% of combat-ready aircraft is an excellent indicator; there was nothing like this in the Luftwaffe and will not be until the end of the war. We emphasize once again that behind this "first echelon" grouping there were approximately the same number of aircraft in the internal districts, in the Transcaucasus and the Far East (in total, the Soviet Air Force at the beginning of the war had 11.5 thousand fighter aircraft and 8.4 thousand bombers). (35, p. 359) Now consider the composition of the aircraft fleet by types and models. At the same time, we

recall once again that we are talking about an "instant photograph", moreover, taken on different days (June 1 and 21), moreover, inconsistent in different sources of information with an error of 5-15%. Accordingly, the figures are rounded to tens; everything is taken into account,

including

temporarily out of order, aircraft.

Bombers

The Luftwaffe group on the Eastern Front was armed with 530 Ju-88s, 280 He-111s and 100 Do-17s.

As part of the Soviet aviation group (including DBA and naval aviation): 1250 DB-3f, 1750 SB, 195 Su-2 and 50 Yak-2/4 bomb load)

is respectively 2150 and 6150 tons of bombs. But these figures do not take into account two important facts. On the one hand, a significantly larger number of carrier aircraft made the Soviet grouping less vulnerable to enemy air defense and, accordingly, provided a greater likelihood of regular "delivery" of these 6 kilotons to enemy targets. On the other hand, each of the 530 "semi-dive" Ju-88s could drop 1 ton of external bombs in a dive, which undoubtedly increased the effectiveness of hitting point targets. The extremely difficult question of how to quantify these circumstances will have to be left open, as it is far beyond the scope of this book. The strike aviation of the battlefield was very small on both sides of the front. In the air groups of the Luftwaffe there were 310 dive "Ju-87". To the same

100 Me-110 fighter-bombers (two SKG groups) can also be included in the category. There

were practically no Il-2 attack aircraft in the Soviet aviation in the first days of the war. Aircraft similar to the Ju-87 and Me-110 include Ar-2 and Pe-2 high-speed dive bombers. In June 1941, the Air Forces of the five western districts included 205 Pe-2s and 140 Ar-2s. The total bomb salvo is 400 and 330

tons, respectively. In this category of bomber aircraft, the undoubted quantitative and qualitative superiority was on the side of the Luftwaffe.

Fighters

The only type of single-engine Luftwaffe fighter on the Eastern Front was the Messerschmitt-109. The German command tried to re-equip the groups participating in Operation Barbarossa as quickly as possible with the latest modification of this aircraft: by June 22, 1941, there were already about 600 new Messers of the F series and about 250 of the previous E series in units. condition was nearly 700 units. The 90 twin-engine multi-purpose "Me-110" (two ZG groups) can also be attributed to the number of fighters. Thus, on the Eastern Front, the Luftwaffe had about 950 fighter aircraft. For reasons detailed in Part 2 of our book, the re-equipment of Soviet fighter aircraft was delayed, and

was not carried out in the most optimal way. Nevertheless, by the beginning of the war, the Air Forces of the five western districts and the Air Forces of three fleets (but excluding fighters

from the 6th Air Defense Corps of Moscow) already had about 950 MiG-3s and 110 Yak-1s. As you can see, the number of Soviet aircraft -fighters of "new types" somewhat exceeded the total number of German fighters of all types on the Eastern Front. On the other hand, the aircraft launched into serial production in extreme haste had a whole "bouquet" of design flaws, while for the Bf-109 the period of "childhood illnesses" was already in the past.

The veteran I-16 remained the main fighter aircraft of the Soviet Air Force and Navy. By the beginning of the war, there were (including naval aviation) about 2000 I-16s in the theater. "Donkeys" are different, from type 10 to type 29. Taking into account the fact that in 1939-1941. 2427 I-16s were produced with powerful M-62 / M-63 engines (type

17, 27, 28 with cannon armament and type 18, 24, 29 with machine gun armament), it can be assumed that it was these donkey models (the performance characteristics of which are discussed in detail in Part 1) that made up the majority. So, for example, in the Air Force of the Baltic Fleet, out of 137 serviceable I-16 fighters (they were the only ones taken into account in the total number indicated above), 132 aircraft belonged to the indicated modifications. In addition, three

dozen fighter aviation regiments were armed with the "latest" (judging by the release date), but certainly outdated technically "seagulls" (I-153). There were at least 1,700 I-153 aircraft in the fighter units. Let's not rush to assess the combat capability of the fighter regiments armed with "seagulls". Reality - as will be shown in the following chapters - turned out to be much more complicated than the "tablet" with performance characteristics. By the way, the low-speed giants TB-3 (which we did not even include in the total number

of Soviet bombers) with tactically correct (i.e. night) use turned out to be both effective and very tenacious: the TB-3 crews performed on them in an average of 100 sorties per combat loss! (122) For 1941, these are record figures. The tragic episode described in the novel by K. Simonov really happened in reality, and it was in the Bobruisk area (on June 29, a group of bombers from the 3rd TBAP received an order to bomb the crossings on the Berezina during the day and was completely destroyed by the Messerschmitts on the way back). Thanks to the outstanding talent of the writer (as well as the gigantic circulation of Soviet publishing houses), it was this episode, and not the dry statistics of the results of the combat use of the TB-3, that became for millions of people almost a "standard" of the actions and capabilities of the Soviet Air Force in the summer of 1941 ...

Concluding the conversation about aircraft and continuing the parallel comparison of June 1941 with May 1940, it should be recalled once again that the French pilots inflicted enormous damage on the Germans on Morans and Hawks, which, in the totality of parameters, were no better than our well-deserved "donkey" and at the same time, just like the I-16, they were inferior to the Messerschmitt in speed. As for the newest MiG-3 and Yak-1, they were at least as good as the British Spitfires of the first Mk-1 series (with machine guns and a 1000-horsepower engine) in terms of performance characteristics and, without a doubt, surpassed the best French "Devoitins" D-520. We repeat that by May 10 there were only 36 (thirty-six) of these "best" in the fighter units of the French Air Force. Soviet historians about the aircraft present in the Soviet Air Force in such quantities do not even

remembered...

The main component of military aviation is not airplanes, not airfields, not aircraft factories, but pilots. Having finished with the recalculation of inanimate objects, we will try to outline some points related to the level of flight and tactical training of the crews of the Soviet Air Force. This topic is extremely complex. First of all, because the desired "level of training" is very difficult to adequately describe some quantitative parameters that allow you to make rational, rather than speculative assessments and comparisons. Perhaps it is precisely because of this complexity that Russian historiography for many decades continued to stagnate at the level of pointless declarations about "Luftwaffe aces who have accumulated two years of war experience" and without exception "young" Soviet pilots with a training raid of "three hours in a box". On November 5, 1940, Decree of the Council

of People's Commissars No. 2265-977s / s "On the Air Forces of the Red Army" was approved, according to which, by the end of 1941, the strength of the Soviet Union Air Force was to be increased to 32432 aircraft and 60 thousand flight crews. (1, p. 354) The last number looks completely irrational. All military aviation in the world always plans to have more aircraft than pilots. And it's clear why. Firstly, the resource of an aircraft (especially an aircraft engine) is very small, and its "peaceful life" is much shorter than that of a pilot. Secondly, in combat conditions, the loss of an aircraft is by no means always accompanied by the loss of a pilot. There is a parachute, there is the possibility of a safe landing of a damaged aircraft (for example, the German fighter squadron JG54 "used up" 2135 aircraft on the Eastern Front during the four years of the war, while 416 pilots died). What did Comrade Stalin have in mind when he planned to produce two

crews for one aircraft? The unthinkable situation in any army in the world in the summer of 1942, when cadets of flight schools were sent to the infantry? It is also worth noting that the appearance of the Decree of the Council of People's Commissars of November 5, 1940 cannot be explained by a "situation of extreme necessity" - by that time there were already 37,558 pilots in the Red Army Air Force. (1, p. 352) These figures should be compared with the fact that the Royal Air Force on the eve of the "Battle of Britain" had at its disposal only 1434 fighter pilots. Plans for the training of tens of thousands of pilots came

into conflict not only with common sense, but also - and much more seriously - with the actual volume of production of aviation gasoline in the USSR. It is sad and strange, but the country, which ranks first in Europe in terms of oil production, experienced an acute shortage of aviation gasoline. The situation escalated significantly precisely at the turn of the 1930s–1940s, when mass

production of aircraft equipped with uprated engines M-62 / M-63 ("donkeys" of the latest modifications and "seagulls"), M-105 ("Ar-2", "Pe-2", "Yak-1", "LaGG- 3"), AM-35/AM-38 (MiG-3 and Il-2). All these engines were forced versions of their predecessors, with the main method of increasing power being to increase the compression ratio and/or boost pressure. Both required gasoline with higher anti-knock properties (with an "octane number" of 92–96 units). The production of high-octane gasoline B-78 in 1939 amounted to only 40.6 thousand tons (this amount could be enough for about 100 thousand

gas stations of a light fighter). The planned task for 1941, established by the Decree of the PB of the Central Committee of the All-Union Communist Party of Bolsheviks of February 8, 1941, assumed the production of 200 thousand tons of B-78, while the estimated need for the Air Force (taking into account new formations) for the year of the war was 1030 thousand tons - and this is without taking into account the needs of the Navy Air Force and industry (several tons of gasoline were spent on bench testing of an aircraft engine). The acute shortage of high-octane gasoline immediately affected the level of flight training. So, in May 1941, in the decision of the Main Military Council and in the order of the People's Commissar of Defense, following the results of the combat training of the Red Army Air Force for the winter period of 1941, it was stated that in the LenVO and ZapOVO flight training was limited by the fuel limit, which was only enough for 30% of the program . (141) It must be admitted that in the matter of flight crew training, the pursuit of incredible "quantity" has clearly prevailed over the requirements of "quality". And although the aircraft

fleet of educational institutions of the Soviet Air Force theoretically made it possible to train up to 50 thousand (!) cadets at the same time, the training of highly qualified specialists in such volumes is impossible. Nowhere and never. The aforementioned Decree of the Council of People's Commissars of November 5, 1940, in a concentrated form, expressed the idea of creating a massive, poorly trained "air infantry" that would "eclipse the sky" over the enemy's head not in a figurative, but in the very direct sense of these

words.

One Decree inevitably required the adoption of the next one (Resolution of the Council of People's Commissars No. 368-167s / s of February 22, 1941), which introduced a "rapid-fire" system for training military pilots. However, even this extremely adventurous document did not provide for the notorious "3 hours in a box", but 13 months of training (9 months in wartime conditions) and 50-54 hours of training flight before sending the pilot to the combat unit. The pilot's training did not end there: the annual training raid in combat units was set at

160 hours, 20 of them for joint exercises with ground forces. (1, p. 355). For our investigation, the most important thing in Decree No. 368 is the date of its adoption - February 1941. The simplest calculation of time by months shows that in June 1941 there simply could not be such "fast food pilots" in the combat units of the Soviet Air Force, and countless lamentations on this topic are either a manifestation of deep ignorance, or deliberate misinformation of readers. Despite serious problems with fuel, flight and combat training in parts of the Soviet Air Force was in full swing. At least in

the western districts and where there was a conscientious, responsible commander. Of the many examples, we will select only those that are related to the formations of the Western OVO Air Force, which suffered the heaviest losses in the first days of the war:

The sky above the airfield trembled with the roar of engines. It seemed that this rumble did not have time to subside in the evening. In addition to the three regiments "I-16" and the regiment "Seagulls" in the division, which I was entrusted with command, there were many training aircraft, communications aircraft - more than three hundred aircraft in total. And **all this buzzed, took off, fired, landed from morning to evening every day (hereinafter it is emphasized by me. - M.S.)**. It seemed to me that the mode of our work was not tight enough, and I hurried the staff officers and regimental commanders. We were told: "You have good equipment, a well-equipped airfield hub, you have been given the right to select the best graduates of flight schools, they **don't save fuel on you ...**"

(55)

This is a fragment from the memoirs of General G. Zakharov, commander of the 43rd IAD of the Western OVO. A similar picture is found in the memoirs of General F. Polynin, commander of the 13th BAD of the Western OVO: ***"Most of the crews have successfully mastered such a complex type of combat training as flying and bombing at night. Flights at night were often made at full radius. The crews learned to bomb targets not only on their own, but also on unfamiliar training grounds ... The minimum time was allotted for landing. Immediately after landing, the aircraft dispersed and camouflaged. Crews were trained to act as needed in a war... Much attention was paid to practicing take-off and landing from unfamiliar unpaved airfields. Here again, the experience gained in China came in handy. This was done most often suddenly: rising to***

air, we did not know what the airfield was like on which we would have to land. On the other hand, the crews acquired the richest practice of redeployment on alarm ... In the regiments, the alarm was announced quite often, usually in the middle of the night ...

" (49) Lieutenant Colonel P. Tsupko, at that time - the commander of the crew in the 13th BAP (9th SAD) recalls:

From dawn to dusk, squadrons of **camouflaged aircraft** with suspended bombs and weapons, with crews stood ready. It was very tiring, but there was no other way out. The regiment had five squadrons of twelve crews each. Usually three of them were on duty, the rest studied, flew. A day later, the squadrons were replaced ...

(64)

Air Marshal N. Skripko, on the eve of the war, commanded the 3rd DBAK, deployed in the deep rear of the Western OVO:

The combat training of the crews progressed successfully. Squadrons **flew almost daily...** Along with intense flight work, **combat alert actions were persistently practiced.** Shelters of the simplest type for personnel were equipped at each airfield, aircraft parking areas were prepared in the zone of dispersal of aviation equipment People fought for speed, clarity, organization of actions on alarm. The study approached the real requirements of the war ...

(50)

The phrase about the "real demands of war" is not accidental. Let's not forget that in addition to dozens (or hundreds) of hours of flight training, many pilots of the Soviet Air Force also had the experience of hundreds of sorties. The pilots who met the beginning of the Soviet-German war in the Air Force units of the western districts were by no means "yellow-mouthed chicks".

Among the leadership of the regiment's administration, squadron commanders, flight commanders were officers from the aviation units of the Leningrad District. All of them had significant service and combat experience gained in the skies of Spain, in battles on

Lake Khasan, the Khalkhin Gol River, in the war with the White Finns ... Almost all of them had government awards. So, for example, the regiment commander Colonel N.F. Efimov was awarded the Order of Lenin and the Order of the Red Banner, the navigator of the regiment, Major G.I. Gabunia was awarded two Orders of the Red Banner. Squadron commanders, their deputies and navigators also received government awards.

(85)

What kind of regiment is this? Special, rare, elite? No, we are talking about the so-called "forming" 202 BAP (41st BAD, Leningrad Military District). Almost all the memories of the participants in the first air battles in the summer of 1941 contain a mention that on the chest of the commander of the regiment (squadron) sparkled the Order of the Red Banner (Red Star, Order of Lenin), received for battles in Spain, in China, against the "White Finns" ...

Everything is relative. One can argue for a long time about whether the combat experience acquired by Soviet aviators during four years of fighting in the skies of Spain, China, Khalkhin Gol and Finland was sufficiently large and significant. But there is no doubt that by May 10, 1940, French and British pilots and their commanders did not have such a modest experience in combat operations: in the eight months of the "strange war" in rare air skirmishes with the enemy, the French shot down 88 German aircraft at the cost of losing 63 of their own. (21) These "battles" cannot even be compared with Khalkhin Gol, in the battles over which Soviet fighters shot down at least twice as many enemy vehicles. As for the Finnish war, the intensity of the actions of Soviet aviation (more than 100 thousand sorties, three-quarters of which took place in February 1940) is comparable only to the events of the grandiose Battle of Kursk (89,300 sorties from July 12 to August 23, 1943). One of the active participants in the "winter war" was

the 1st MTAP of the Baltic Fleet Air Force (it was this regiment that bombed Helsinki on the first day of the war). Regiment navigator (later Lieutenant General of Aviation) P.I. Khokhlov writes in his memoirs:

...Previous studies and military operations have yielded results...Sniper crews for bombing and minelaying appeared in the regiment. Many flights were carried out using radio navigation aids. DB-3 aircraft were already equipped with RPK-2 radio semi-compasses, which were competently used in flights. The most prepared

crews mastered flying in the clouds. On average, each crew flew more than 200 hours **in 1940** (*emphasis mine*. - M.S.). (

143)

It is not surprising that by the beginning of the war with Germany, more than three thousand Soviet pilots had experience of personal participation in hostilities. combat experience, they were exactly on the western border - there was also the Far Eastern Front, there was a large Air Force grouping in the Transcaucasus, there was the 6th Air Defense Corps in Moscow ...).

Much more significant is the comparison of the combat experience of Soviet pilots not with their future (and extremely unexpected for Stalin allies), but with a long-awaited enemy - Luftwaffe pilots. Of course, during the two years of the war, German aviation, and in all its units - pilots, commanders, technical personnel - accumulated vast practical experience. Without a doubt, it was this experience of modern air warfare, the experience of successes and failures, that represented the most valuable component of the combat potential of the Luftwaffe. Without a doubt, in three months of fighting against the extremely small and technically backward "White Finn" aviation, Soviet pilots did not go through such a "school". These are indisputable facts, and the author is not going to put them under

doubt.

The "reverse side of the coin" turned out to be unjustifiably forgotten. In war there is no correspondence and free "education". For the vast combat experience gained in air battles over France and England, Libya and Crete, the Germans paid with the loss of pilots - living carriers of this experience.

The figures characterizing the loss of Luftwaffe flight personnel are impressive. Only in the course of what Soviet historians called the "triumphant march of the Wehrmacht" (the defeat of France and its allies in May-June 1940), the Germans irrevocably lost 3022 people from the flight crews. (165) It was the aircrews, and not the personnel of the Luftwaffe as a whole. Further more. By October 1940 (by the time the most active phase of the "Battle of Britain" ended), only 4 pilots from its original composition remained in the ranks of the III / JG-52 fighter group (that is, one out of every ten!). (43) In the JG-51 fighter squadron, the loss of pilots by the beginning of Operation Barbarossa amounted to 116 people, i.e., almost equaled the squadron's regular strength. (63) In general, for the incomplete two years of the war, from September 1, 1939 to June 22, 1941, the total losses of aircrew

Luftwaffe amounted to 18,533 people, including 13,535 people killed, killed in disasters and missing (irrecoverable losses). (166, p. 531) If, with such monstrous losses, the

aviation of Nazi Germany did not disappear, but even increased in number, then there is only one rational explanation for this - on June 22, 1941, the seats in the cockpits of combat aircraft, "vacated" after the loss of experienced, well-prepared in the pre-war years, the crews were filled with thousands of hastily trained pupils of the "Hitler Youth". During the first two years of World War II, 1,951 cadets were killed in the Luftwaffe flying schools and another 1,439 were wounded. (166) Some idea of the pace and methods of training these pilots can be gained from the fact that on June 22, 1941, six "Messers" from the II (Sch) / LG-2 fighter group could not cross the Soviet border, because they crashed during takeoff at the airport in Suwalki. "Schülengruppe" is, in Russian, something like "combat training group". Yes, the 109th "Messer" had a well-known habit of tipping over on takeoff, but smashing six cars out of 38 available in total

for one day...

As an illustration of these dry figures, we can give the following example. By the time the main events of the "Battle of Britain" were over, the nine best Luftwaffe fighter pilots looked like this: Balthasar, Wieck, Galland, Joppien, Melders, Mayer, Müncheberg, Oesau (Oesau), Schöpfung. Only three of them: Melders, Oesau and Joppien took part in air battles on the Eastern Front from the beginning of Operation Barbarossa. Four - Galland, Balthasar, Müncheberg and Schöpfung - continued to fight on the Western Front against the British, and two - Wieck and Mayer - had already been killed by this time. (43) On June 22, 1941, the surviving German aces met with the Soviet - as it is written

in one modern book - "inadequate amateurs." The first day of the war was, to put it mildly, not the most successful for the Red Army in general and the Soviet Air Force in particular. Nevertheless, already on June 22, the biography of the commander of the fighter squadron JG-27 Schellmann, a veteran of the Spanish and all subsequent campaigns, ended forever. On the same day, another most experienced Luftwaffe ace was shot down - the commander of the fighter group II / JG-53 Bretnunz (Bretnunz) (he died from his wounds four days later). Colonel Reithl was seriously wounded in the headquarters "Ju-88" from the headquarters of the bomber squadron KG-77 shot down over the Baltic states. On the same first day of the war, the commander of the I / KG-Z bomber group Heinze was wounded, the next day the group commander was shot down by Soviet fighters

dive bombers I / StG-2 Hitchholm and the commander of the fighter group II / JG 51 Feso (the last two survived and were found by the advancing German troops). Of course, on

June 22, 1941, the process of "knocking out" experienced, well-trained Luftwaffe flight personnel did not stop, but only began. A year later, on June 2, 1942, the commander of the Air Force of the Southwestern Front in his order states that ***"the enemy throws his poorly trained flight personnel into battle. Of the downed and captured German pilots, there are dropouts who, after graduating from school, made only 1-2 sorties. From the testimonies of the prisoners, it was established that the layer of this undertrained part of the flight personnel in the units of the fascist Air Force operating against our front is very high (up to 50%)."*** One can argue about the value of these "percentages", but the indisputable fact is that most of the problems with the training of flight personnel traditionally attributed to the Soviet Air Force were just as relevant for the aviation of our enemy, drawn into a protracted air war on many fronts.

Another persistent myth, without which not a single publication devoted to the events of June 22, 1941, is the "dogma of the undeveloped". Regular readers of historical literature have already understood what is at stake. For the rest, let us explain that the latest "truth about the war" looks like this: "old types" aircraft (I-16, "SB", DB-3) should be discounted because they were "hopelessly outdated"; but the latest "MiG-3" and "Pe-2" also do not need to be taken into account - they "were not mastered by the flight crew." Zero plus zero equals zero, and thousands of Soviet aircraft quietly disappear. Like a dream, like a morning mist... The stability of this myth is not accidental - it contains

a considerable amount of truth. Compared to the familiar and thoroughly studied "donkeys" and "SB", the new aircraft were poorly mastered.

This is a fact. This fact should be assessed, in our opinion, guided by the same universal principle: "everything is known in comparison". Three warm months (April, May, June), which were at the disposal of the command of the Soviet Air Force before the start of the war, is very little compared to previous years of conditionally "peaceful" life. Only 686 pilots trained to fly the MiG-3 and 156 pilots trained to fly the Yak-1, who were retrained before June 22, are, of course, very few in comparison with the huge flow of "new types" fighters ", gushing from the factories of the aviation industry (in 1941, 3100

"MiG-3", 2463 "LaGG-3" and 1354 "Yak-1"). By the way, the numbers 686 and 156 are taken from the work of V.I. Alekseenko, a big hater of the "democrats" ... Now let's

look at these three warm months from the standpoint of pre-war orders, requirements, standards. On February 19, 1941, Rychagov signed the "Plan for the retraining of the flight personnel of the Red Army Air Force units on the new materiel." (16, pp. 665–676) First of all, from this document it becomes obvious that the program for re-equipping the fighter units of the Air Forces of the western districts with MiG-3 aircraft was generally overfulfilled. 7 IAPs, 15 IAPs, 23 IAPs, 4 IAPs, 55 IAPs each received six dozen MiGs, the re-equipment of which was planned for the 3rd (or even 4th) quarter of 1941. Another thing is even more remarkable - comparing the planned time for the receipt of new equipment with the planned time for completing the retraining of the flight crew, we see that two to three months were allotted for the development of a new fighter. No more. And this, mind you, is peacetime plans.

And in what terms did the rearmament of air units and the retraining of pilots in the war actually take place? Was the transition of the I-16 to the MiG-3 the only such event in the history of military aviation? Some fighter regiments of the Air Force of the Northern Fleet (in the Arctic, due to the flow of "Lend-Lease" aircraft, the renewal of the fleet took place very quickly) during the war they rearmed five or six times: from "donkeys" to "Hurricanes", then to "Yak-1", from "yaks" to "Kittyhawks", then to "cobras", at the end of the war - to "La-7". And how long did it take to retrain the pilots? Is it really six months for each new aircraft? Let's see how things were with our allies. In May 1940, the re-

equipment of the French Air Force fighter groups was carried out literally "on the go", in the midst of intense air battles. So, in just three weeks, from May 10 to June 5, the following were rearmed: (21)

on "Devuatin" D-520 - three groups (GCII / 3, GCII / 7, GC III / 3); on "Bloch-152" - two groups (GC II / 6 and GC II / 9); on the Hawk-75 - one group

(GC III / 2). It is worth paying special attention to the pace of development of the Devuatin-520 fighter. The very first machines were commissioned in April 1940. By May 10, there were only 36 of them. Before the ceasefire, the French Air Force was supplied with another three hundred Devuatins, which were successfully mastered by the flight crew in a matter of days. Fighting on these fighters, the French pilots shot down 108 German aircraft at the cost of losing 54 of their own (another 31 Devuatins were destroyed in accidents). Best on that

the moment of the German ace Werner Molders was shot down on June 6, 1940 by the su-lieutenant Pomier-Lerag from the GCII / 7 (at that time the parachute saved the life of the Luftwaffe pilot). Then the French pilot shot down another Messer, after which he ran out of ammunition, and seven German fighters shot down the helpless plane. The courageous pilot died in the Devuatin, in the cockpit of which he sat for the first time only a few

weeks ago.

Finnish fighter aviation (which on the whole demonstrated exceptionally high combat effectiveness in 1939-1944) twice - in the winter of 1940 and in the summer of 1944 - was re-equipped with new types of aircraft directly in the course of hostilities. After two or three familiarization sorties, the pilot immediately went into battle. Result? The ratio of losses of Soviet and Finnish fighters in the summer campaign of 1944 is expressed as 8 to 1. Of course, in favor of the Finnish Air Force. (142, p. 600) With these facts in mind, let's take a look at the situation in the Soviet

fighter aviation regiments. According to the reports of the military representatives of plant No. 1, the mass dispatch of MiG-3 fighters to the air regiments of the western districts began in the second half of January 1941. What were the aviation commanders of all levels doing if the new aircraft turned out to be "completely undeveloped" by the second half of June? And when did this notorious "untappedness" come to light – the day before June 22 or half a century later, when it was necessary to find another "objective" reason for the defeat?

The exact answer to these questions will consist of dozens of mutually exclusive parts. The most surprising paradox of the totalitarian Stalinist system was the complete absence of a uniform, universal (total) order. Where there was an intelligent commander, in the unit entrusted to him, flight work was in full swing from morning to night. Here, for example, are the memoirs of the pilot of the 31st IAP (8th GARDEN, PribOVO) N.I. Petrova:

... We flew a lot. **In the autumn of 1940** (hereinafter it is emphasized by me. - M.S.) they began to study the new MIG-1 fighter ... It differed in many respects from the I-16 aircraft, so it was necessary from morning to night, without considering time, to study the engine and aircraft, operating instructions and piloting techniques. Test pilots arrived, the assembled aircraft flew around. The tester Stefanovsky was in charge, in the form of conversations he explained the features of the MIG-1 aircraft piloting technique, what to look for, etc. I remember how we suffered, there were no flight accidents

there were, but the prerequisites for them were ... Nothing, they took possession and before the Great Patriotic War they already firmly took possession. **From April 1941 they were already on duty.** They were on combat duty on MIG-1 aircraft ... At the end of April, they began intensive training **as part of a flight, shooting at a cone, air battles ...** Often, **night flights were made for group flying** in

the composition of the link ...

(125)

P.I. Tsupko, crew commander of the Ar-2 dive bomber
recalls:

... We received **the appropriate instructions and guidelines** for dive bombing. But it is one thing to read on paper and quite another to perform in the air Our training flights **were more like research flights.** After each flight, the commanders gathered us and, based on the reports of the observers and the reports of the crews, scrupulously, minute by minute, analyzed the actions of the pilots and shooters of the scorers The landfill was located on a wasteland in Belovezhskaya Pushcha. There, the contours of tanks, vehicles, artillery batteries and just circles with crosses in the middle were drawn on the ground with lime. We bombed these ground targets with cement bombs. From flight to flight our skills grew, our skills were polished. **By the spring of 1941, we were quite confident in this method of bombing ...**

(64)

And at the same time, in another part, another sensible commander was denounced about espionage in favor of Zanzibar. In the third part, the commander fought "to reduce the accident rate", as a result of which the pilots, instead of flying, crammed the piston stroke and the diameter of the cylinder of the AM-38 engine (this is not a bad joke, this is the prose of the life of the 4th ShAP). There have already been outlandish activities:

... At that time, we had to start with drill training for a single fighter, to show how we can command a squad ... Preparations began. For my department, I picked up eleven stately fellows - Red Army soldiers with a height of 175

up to 180 centimeters. And they set about... Drilling, political studies, cleaning weapons and walking in line along the surrounding roads, singing songs... And so every day, for a whole month... There was only one thing that was embarrassing: compared to others, I had a commanding voice that was not very good. It didn't work out: "Rrr ya, rrr-ya, rya, ah, three-and-and ..." Or "Pady-y-may! .." No, I didn't succeed. And then I decided to act according to Demosthenes: I regularly began to retire to the hills and scream there! It is to shout - that there is strength, loudly, stunned, then recite verses, shout out commands, individual words,

sing...

... After a brilliant victory in drill training, I had a new concern. Now the commander had to appear every time in full form. And "the whole form" means with a saber and with spurs. Another problem! Once I put on the saber and almost fell: it got entangled between my legs ... In order to keep the brand of the best combatant, I still had a lot of work to do myself, and every morning in my office I conscientiously trained ...

Dear reader, what do you think - what is THIS about? Who is this screaming running through the hills? This is twice Hero of the Soviet Union, an outstanding fighter pilot, Honored Air Marshal E.Ya. Savitsky enthusiastically tells in his memoirs about how in the spring of 1941 he spent a whole month mastering "**rrr-ya, rrr-ya, rya, ah, three-and-and ...**". And what position did the 28-year-old captain Savitsky hold in the spring of 1941? The answer is that he commanded the 29th Fighter Air Division. And who is this idiot - I can't find another word - who in the spring of 1941 distracts the commander of an aviation division to a competition in order and song, and then also demands to walk around the airfield in spurs and with a saber? And this is the commander of the Far Eastern Front, a hero of the civil war, a comrade-in-arms of Budyonny and Timoshenko, army general Apanasenko. They say one of the best...

Chapter

22 IMPACT ON AIRPOINTS - THEORY AND PRACTICE

Our research has finally come to the central point - to an attempt to figure out what really happened to Soviet aviation in June 1941. The classic version is known. Hundreds of books and tens of thousands of newspaper articles, literally in the same words, tell the terrible story of the destruction of Soviet aviation (or, at least, the Air Force of the Western military districts) as a result of a sudden, crushing and inevitable strike by the Luftwaffe on "peacefully sleeping" airfields:

... On June 22, 1941, large groups of fascist bombers attacked 66 airfields, on which the main aviation forces of the western border districts were based. As a result of attacks on airfields and in fierce air battles, the

enemy managed to destroy up to 1,200 aircraft, including 800 at airfields ... As a result of sudden massive attacks on airfields and the air battles that followed, the losses of the air forces of the border districts by noon on June 22 amounted to 1200 aircraft (including about 800 destroyed at airfields) ... The aviation of the Western and Kiev OBO suffered especially great damage, where on the first day of the war the Nazi aviation managed to destroy and damage 1015 aircraft ... The greatest losses in the first hours of the war were suffered by the Air Force of the Western Front. By the end of the first day of the war, losses here reached 738 aircraft, and losses on the ground - 528 aircraft ...

(31, 144, 27, 41)

As befits a real myth, the myth of the "first annihilating strike on airfields" lives according to its own laws, not only not needing any documentary confirmation, but also not weakening in the least from the flow of new facts that have become available to everyone from the beginning 90s. The "Berlin Wall" collapsed, disappeared into oblivion

The Warsaw Pact, the "unbreakable union" fell apart into 15 fragments, ideals, idols, flags, anthems changed with dizzying speed in the post-Soviet space - and once and for all the memorized mantra about "1200, of which 800 are on earth" still sounds incessantly. And now, in 2008, Moscow State University. Lomonosov publishes the textbook "History of Russia" (a group of authors under the guidance of A.S. Orlov, M., "Prospekt", 2008), having learned which students must mint: "In the first days of the war (*thank* you for not at least in „ the first hours". - *M.S.*) **a significant part of Soviet aviation was destroyed right on the airfields.** The myth of the destruction of Soviet aviation at "peacefully sleeping airfields" was diligently promoted by communist propagandists by no means by chance. The story about a peacefully sleeping country that became the object of a vile treacherous attack was very useful - this legend removed

many "unnecessary" questions about the real plans and real actions of Comrade Stalin. But even that was not the most important thing. First of all, it was necessary to drive into the minds of the contemporaries of the tragedy, their children and grandchildren, the idea of the objective inevitability, the inevitability of what happened in the summer of 1941. For which the thesis of some kind of "super-extra-efficiency", inherent in such a tactic as a strike on airfields, was the best fit. The treacherous adversary, taking advantage of the naive credulity of Comrade Stalin, was able to use this miraculous trick - that's where all the troubles and

started...

In an effort to present a strike on airfields as a "magic wand" capable of turning the tide of a war in the air in a matter of hours, Soviet historians contrived to outdo even the most deceitful Dr. Goebbels in lies. So, for the entire campaign of May - June 1940, French aviation irretrievably lost 234 aircraft from attacks on airfields (which amounted to 26% of its total losses - a very large figure, by the way). In the first six days of the May battles, the British aviation fighter units based in France lost only 4 (four) aircraft on the ground. Of course, such modest numbers did not suit Nazi propaganda, so the German news agencies announced that already on May 11 and 12, 1940, 436 enemy aircraft were destroyed on the ground. One well-known Soviet professor, academician of the Russian Academy of Sciences, doctor of military sciences and others claims that **"on May 10, as a result of strikes on 72 French airfields, several hundred aircraft were destroyed, and on May 11 and 12 repeated massive strikes took place, which disabled another 700–750 French**

planes..."

Strictly speaking, just a comparison of the sacramental number of "1200 aircraft" with the total number of Soviet aviation groups in the Western theater of operations shows that 85% (six out of seven) of the aircraft from the "first annihilating strike" did not suffer at all. And the next day after the notorious "1200, of which 800 are on the ground," the Soviet Air Force outnumbered its enemy many times over. The losses of the flight crew - and this is the basis of the foundations of the combat capability of military aviation - were (as will be shown below) completely insignificant. What then led to the catastrophic defeat? ***"No matter how dry***

these figures lined up in close columns in an officially printed document may look, they actually provide more valuable material for history than volumes full of rhetorical nonsense" (K. Marx, F. Engels. Soch., vol. 13, p. 513). We will start with dry numbers. True, they were "lined up in tight columns" not in an "officially printed document", but in a rotaprint collection, decorated with the heading "Top Secret". In 1962. The General Staff of the Air Forces of the USSR prepared a statistical collection "Soviet Aviation in the Great Patriotic War 1941-1945. in numbers". (23) As compilers, 26 people are listed in ranks from lieutenant colonel to major general. The collection

was declassified in 1992 and since then has become one of the main sources on the topic (in 2006 it was posted in full by Yu. Minkevich and P. Andriyanov at http://ilpilot.narod.ru/ws_tsifra/index.html). Among many other important figures in the collection (hereinafter, it will be called "VVS in figures" for brevity), the losses of Soviet aviation are listed, broken down by years of war, types of aviation, types of aircraft, causes of losses. We will return to these figures more than once, but for now we will note the main thing for this chapter - the number of Soviet Air Force aircraft lost from enemy attacks **on** home airfields: Table 22 year 239 2.52 0.72 1944 210 2.68 0.59 1945 38 1.06 0.25 TOTAL: 691 2.37 0.65 DBA losses are taken into account. However, given that

the losses

airfields in these branches of aviation were negligible, and their aircraft fleet was no more than 10–15% of the total, Table 22 quite adequately reflects the overall picture. And the picture turns out to be absolutely enchanting: in three years and four months of the most difficult war, less combat aircraft were lost at airfields than in ONE DAY) on June 22, 1941. The dynamics of bomber losses is especially impressive. For three years and four months, 62 bombers were lost at the airfields. And in one day on June 22, 1941, 351 bombers were allegedly lost only in the air force zone of the Western Front (at least, this is the figure that M.N. Kozhevnikov cites in his fundamental monograph), and the German fighters of the 2nd Air Fleet themselves claim no more than than for 100-150 downed Soviet bombers ... Further, we see that losses at airfields were less than 3% of the total number of irretrievable

losses. It was the smallest, rarest cause of combat losses. On a huge front, the Soviet military aviation, huge in number (at least 8-10 thousand combat aircraft), on average lost less than one aircraft per day from strikes on airfields. If we compare the number of aircraft lost from enemy strikes on airfields with the total number of combat aircraft that entered service with the Red Army Air Force in the corresponding year (35, pp. 359–360), then we get figures of less than one percent, i.e., in fact, a vanishingly small quantity. Less than the statistical error in the calculation of the values taken into account above. Tens of times less than the number of aircraft crashed at the same airfields due to equipment failures and piloting errors.

As the attentive reader has already noticed, we diligently passed over the year 1941 in silence. Maybe that year the stars became somehow special? Yes, nothing of the sort. The irretrievable losses of Luftwaffe aircraft from enemy attacks on airfields amounted to: 13 in June, 19 in July, 14 in August, 7 in September, 10 in October ... Total on the Eastern Front in 1941 at airfields from enemy attacks (i.e., Soviet aviation) 62 aircraft were irretrievably lost: 32 fighters, 19 bombers (including Ju-87 dive bombers), 7 multipurpose Me-110s and 4 transport Ju-52s. (145, 146, 147) On average, for a week at airfields (with the rarest exceptions, these were Soviet airfields on the territory occupied by the Germans), the Luftwaffe lost 2 aircraft each. Two a week, not 800 in one day. But, perhaps, the Soviet command simply did not know about such a miraculous

tactic as a strike on enemy airfields? Nothing like this. Knew and most persistently tried to use this technique. From the very first hours of the war.

Directive No. 2, signed by People's Commissar of Defense Tymoshenko at 7 am on June 22, in particular, demanded: **"... Destroy aircraft at enemy airfields and bomb the main groupings of his ground forces with powerful strikes by bomber and attack aircraft. Air strikes should be delivered to the depth of German territory up to 100–150 km ..."** This order was not only

given, but also carried out. More precisely, it was done. Moreover, some bomber regiments began raids on the airfields based on German aviation literally at dawn on June 22, even before the adoption of Directive No. 2 (more on this will be discussed in the following chapters). Alas, no panic reports, reports, memoirs of pilots and commanders of the Luftwaffe about these raids can be found. In war, as in war. We bomb - we are bombed ...

Having received air reconnaissance data on the concentration of about fifty fascist fighters on one of the airfields (***we are talking about the battles on the Berezina at the end of June 1941.*** - M.S.), the front air force commander decided to strike with the forces of the 43rd Fighter Aviation Division. Taking the Nazis by surprise, our pilots destroyed the German Me-109 aircraft standing on the ground with machine-gun fire and rockets. 79 sorties to the fascist airfield were then made by fighters and inflicted significant damage on the Nazis, without losing a single one of their cars ...

This is a fragment from the memoirs of Air Marshal Skripko, in those days - the commander of the 3rd air corps of the DBA. Fifty "Me-109" at the airfield near the Berezina - this is most likely one of the fighter groups of the Melders JG-51 squadron. 79 sorties on one airfield - this is a huge concentration of forces; practically not a single airfield based on the Soviet Air Force on the morning of June 22 received such a blow. What is the result? Of course, the JG-51 squadron did not disappear anywhere, the Melders pilots continued to fly and fight. The irretrievable losses of the JG-51 at the airfields taken into account in the German documents amounted to 1 (one) aircraft in June-July 1941. And in the neighboring JG-53 - one plane.

By the end of June 1941, almost all Luftwaffe fighter and attack air groups flew from airfields in Poland and East Prussia to airfields in the former Baltic and Western districts. A little later, in early July, units of the 4th Air Fleet were relocated to the airfields of Ukraine. It was from the Soviet airfields, where allegedly "there was nothing" (gasoline storage facilities, telephone lines, caponiers for

planes, shelters for personnel), German aviation and won back all summer and all autumn of 1941. It was on these airfields, the location of which was known to the Soviet command to the nearest meter, that Soviet aviation was now delivering massive strikes.

... On July 8, the Stavka organized an air strike by the forces and means of the Air Force of five fronts (North, North-Western, Western, South-Western, Southern), DBA formations on 42 enemy airfields on the front from the Baltic to the Black Sea ... At dawn on July 8, long-range bomber aviation formations struck at 14 airfields, and the air forces of the fronts - at 28 airfields. A total of 429 sorties were flown. Many aircraft were destroyed at enemy airfields, including the Air Force of the Western Front, which disabled 54 German

airplane...

(27)

54 planes - that's just in one day. In total, in the period from 6 to 12 July, the Air Force of the Western Front alone allegedly destroyed 202 enemy aircraft on the ground. (23) Moreover, in the report, signed by the chief of staff of the Air Force of the Front, Colonel Khudyakov, it was also specifically noted that **"enemy losses from the action of night bombers were not taken into account."** It is a pity, but the enemy did not know anything about it. As noted above, on the entire Soviet-German front (and not just on the Western Front) the Luftwaffe lost 19 combat aircraft on the ground in July. Active actions to destroy enemy

aircraft at airfields were carried out in July by the 41st Air Force of the Southwestern Front. So, in the report of the commander of the Air Force, General Astakhov, we read:

- ... for the period from July 1 to August 10, 1941, units of the Air Force of the Southwestern Front destroyed 172 enemy aircraft at airfields. This information is not complete enough, since the losses inflicted on the enemy Air Force during night raids are not fully taken into account ...

(148)

A major operation on the scale of the entire Soviet-German front was carried out in October. **"The Red Army Air Force in the period from October 11 to October 18, 1941 carried out a number of bombing attacks on enemy airfields**

in the northwestern, western and southern directions. In just two days (October 11 and 12) and on the night of October 13, 166 enemy aircraft were destroyed at the airfields of Vitebsk, Smolensk, Orel, Orsha, Siverskaya and

others. (27) In fact, the enemy lost 10 aircraft on the ground. For the whole October, not two days and one night...

Other participants in the world war acted not much more effectively. So, during the famous "Battle of Britain" in the first four days of the German air offensive (from August 12 to 15, 1940), Luftwaffe pilots destroyed 47 English fighters at the airfields - at the cost of losing 122 of their own aircraft! And this despite the fact that the number of three Luftwaffe Air Fleets involved in the strike was greater than at the beginning of Barbarossa, and the only combat mission of this air armada was precisely the suppression of the Royal Air Force, while during the invasion of the USSR the Luftwaffe was forced to divide their already meager forces into gaining air superiority, fire support for ground forces, destroying roads, crossings and warehouses in the rear of the Red Army, operational reconnaissance, etc.

A drowning man clutches at straws. The absurd tale about the destruction of a huge grouping of the Soviet Air Force in one day, "from a raid, from a turn," began to fall apart at the first contact with real facts. Therefore, in recent years, the pages of pseudo-historical literature devoted to the events of June 22, 1941, are simply littered with "devil's eggs" (slang for the German 2.5-kg fragmentation bombs SD-2). The downpour of these bombs, "gushing from the bomb bays of German bombers" and predetermined the supposedly unprecedented effectiveness of the strike on "peacefully sleeping airfields."

At the heart of such reasoning (alas, very, very common) is the following "logic". A rifle bullet is guaranteed to pierce a soldier's tunic. Therefore, 3 million rifle cartridges are enough to destroy an army of three million. In reality, everything is much more complicated. Not every bullet hits the target (and not every cartridge is spent on firing a shot at the enemy). In the second half of 1941, the Red Army used up 854 million rifle cartridges (and this is not counting the 1,750 million cartridges lost in the warehouses of the western military districts), but it was still very far from the complete destruction of the Wehrmacht ...

Seriously speaking, the bomber aircraft of the Soviet Air Force were armed with a wide variety of ammunition, with a total number of more than 60 types. There were also small-caliber fragmentation bombs,

designed to hit area targets, and unlike the Luftwaffe, in which the ill-fated "eggs" spilled over the target from a box loudly referred to as a "bomb cluster", a special rotational-dispersive bomb (RRAB) was developed for the Soviet Air Force. Thanks to the installation of stabilizers at a certain angle to the air flow, the Rrab spun up in flight to such a speed at which the centrifugal force tore the shell, and 116 small AO-2.5 fragmentation bombs flew out of a large bomb. In addition, there was a variant of equipping the RRAB with glass beads with an incendiary mixture of the KS - in this case, the affected area reached one hectare. The RRAB was tested, put into mass production, adopted by the Soviet Air Force and practically used during the bombing of Finland in the winter of 1939-1940 (there it was called "Molotov's basket"). In addition, there were special "pouring devices" with which the enemy was poured with a mixture of KS or a suspension of white phosphorus. In addition, there were "simple" ABK-500 underwing cassettes, which contained 108 incendiary ZAB-1, or 67 fragmentation AO-2.5 ... There was a lot of things, but neither to destroy, nor at least significantly weaken the German aircraft by attacking airfields and failed.

These are the facts. Facts do not need proof, but deserve historians to try to explain them. In this case, there are no particular difficulties with the explanation. In the era of the Second World War, taking into account the capabilities of the weapons technology of that time, an air strike on enemy airfields was ineffective and very "expensive" measure. First of all, it should be reminded

once again that the main component of combat aviation is not airplanes, but pilots. A strike on airfields - even the most successful for the attacking side - only leads to the destruction of aircraft. The attacking side loses in the air over the airfield not only planes, but also pilots. Moreover, it loses irrevocably - a pilot shot down over the airfield will either die (it is almost impossible to use a parachute at low altitude), or will be captured. Both that and another in military language is called "irretrievable loss".

Secondly, it is much more difficult to destroy an aircraft on the ground than in the air. The flying object is vulnerable in flight. A single hole in the engine cooling radiator, a single control rod, interrupted by a fragment of an anti-aircraft shell, a piece of the elevator skin, torn out by a shell explosion from the smallest caliber air gun, will lead to

fall or - in the most favorable case - to an emergency landing, in which the aircraft is likely to be completely destroyed. If this landing takes place on enemy territory (and during a raid on an enemy airfield, this will most likely happen), then the downed aircraft will go into the category of "irretrievable losses". Again - along with an extremely scarce pilot in the war. An aircraft standing on the ground can be

irretrievably destroyed only if it is directly hit by an air bomb. Shrapnel "wounds" from an aerial bomb that exploded to the side can disable the aircraft, but only for the duration of the repair. And this time - depending on the severity of the damage, the equipment and qualifications of the repair services - can be only a few days or even a few hours. Was it easy with the aiming equipment of that era to achieve a direct hit with an unguided bomb on an aircraft? According to the Main Directorate of the Red Army Air Force, the crew of the SB bomber, when bombing from a height of 2 km, on average achieved 39% of the dropped bombs in a rectangle of 200 by 200 meters; the average circular probable deviation from the aiming point was 140 meters. (23) Simply put, there was no question of any targeted bombing on such a point target as an aircraft. Moreover, for targeted bombing, you need to find the target - but with this, in the event of a strike on airfields, there are big problems.

The simplest camouflage nets (or even a simple bunch of green branches) in combination with decoys (simple and cheap aircraft mock-ups made of plywood, boards and cardboard) make the task of visually detecting an aircraft on the ground almost unsolvable. It was possible to realize this "almost" by descending to extremely low altitudes (50-100 m), which is not at all easy (there were no automatic terrain tracking machines at that time) and very dangerous (at such a height, an aircraft can even be shot down by a dense rifle fire, not to mention anti-aircraft guns and machine guns). But that's not all - in order to exclude the destruction of the aircraft by fragments of the bomb dropped by it, the bombing had to be carried out either from a height of more than 300–500 meters, or using a delayed action fuse. However, the latter method turned out to be even less effective, since a horizontally flying bomb, after being dropped from an extremely low altitude, ricocheted and fell at a completely random point. In addition to bomb weapons, the aircraft of the 41st year had small arms on

board. The 20-mm air guns of the German "Messers", Soviet "donkeys", "yaks" and "silts" could cause serious damage to an enemy aircraft standing on the ground. But here comes the next

paradoxical, at first glance, the problem: it is more difficult to get into a stationary plane than into a flying one in the sky. The problem is the timing of aiming and shooting. Having "tailed" the enemy and equalizing its own speed with that of the target, the fighter can fire from a quasi-constant distance indefinitely (until the cartridges run out). When firing at a fixed target, the pilot, who, in a gentle dive, at a very modest speed of 360 km / h (i.e., 100 m / s), attacks an aircraft standing on the ground, only 2-3 seconds: from the moment when it becomes possible aimed shooting (distance to the target 250-300 m), until the inevitable collision with the ground. Relatively inexpensive aircraft shelters (earth ramparts, semi-caponiers) made attacking and aimed shooting at an aircraft even more difficult and even less effective. Last, and most importantly: "There are two wills in the field." An old Russian saying is the best way to explain all the "pluses and minuses" of

a strike on airfields. War is an armed confrontation between two sides, two opponents, each of which, in order to achieve victory, shows perseverance, courage and resourcefulness. And if an air strike on an airfield does not take place in the form of a leisurely execution of planes abandoned on the ground, but in the course of a battle (i.e., with active opposition from an armed enemy who does not want to recognize himself as defeated), then this tactic becomes deadly for the attacking side.

The flight personnel of the aviation units that were attacked showed perseverance. The officers rushed to the cars, despite the explosions of bombs and machine-gun fire from attack aircraft. They pulled planes out of burning hangars. The fighters were running across the cratered field towards the impenetrable wall of the smoke screen and the continuous glare of explosions. Many immediately overturned in the funnels, others flew up, thrown up by the burst of bombs, and fell in a pile of burning debris ... And yet, some managed to take off. With the courage of blind despair and anger, no longer following any plan, out of order, they entered into a single battle with Soviet aircraft ...

So N.N. Shpanov, in his famous book *The First Strike* (1939), described the expected first strike of Soviet aviation on German airfields. Even the hated Nazis were supposed to have "stubbornness and courage." Even in the Soviet military-patriotic "agitation", a strike on an enemy airfield was not portrayed as a miraculous "golden key" that opens the door to an easy, bloodless victory.

It is important to note that the legend about the super-effectiveness of strikes against airfields was invented by Soviet "historians" retroactively. It was invented when it was necessary to find relatively decent explanations for the terrible defeat of the Soviet Air Force in the summer of 1941. The very limited possibilities of this tactical technique were well known to military specialists even before June 22, 1941. Known already in those years when N. Shpanov wrote his legendary story. The Soviet pilots and their commanders had experience of the war in Spain, and from From this practical experience, absolutely correct conclusions were drawn:

In the first period of the war, both sides carried out intensive operations on airfields with the aim of gaining air supremacy. Subsequently, however, they almost completely abandoned this. Experience has shown that operations on airfields produce very limited results.

Firstly, because aviation is dispersed at airfields (no more than 12–15 aircraft per airfield) and is well camouflaged; secondly, airfields are covered by anti-aircraft artillery and machine guns, which forces attacking aircraft to drop bombs from a high altitude with a low probability of hitting; thirdly, the damage to the airfield by air bombs is so insignificant that it almost does not delay the departure of enemy aircraft; minor damage to the airfield was quickly repaired, and broken communications were restored. Very often, bombers dropped bombs on an empty airfield, as enemy aircraft had time to take to the air in advance. For example, in July 1937, the rebels made 70 raids on the airfield in Alcala in groups of up to 35 aircraft. As a result of these raids, 2 people were injured, two planes and a truck were destroyed ...

(83)

Spain was followed by fighting in China and at Khalkhin Gol. New combat experience again showed that strikes against airfields were inferior in effectiveness to other tactics in the struggle for air supremacy. At the well-known meeting of the highest command staff of the Red Army on December 23–31, 1940, the practice of war was summarized as follows:

G.P. Kravchenko: The main thing is aerial combat... I am based on my own experience. During operations at Khalkhin Gol

to defeat only one airfield, I had to fly out several times as part of a regiment. I took off with 50-60 aircraft, while at this airfield there were only 17-18 aircraft.

CM. Budyonny: You spoke about losses at airfields, but what is the ratio in losses at airfields and in the air?

G.P. Kravchenko: I believe that the ratio between losses at airfields will be as follows: in particular, at Khalkhin Gol, I had this - I destroyed 1/8 of the part on the ground and 7/8 in the air.

G.M. Stern: And about the same ratio in other places.

With all this, in certain situations, such a tactical technique as a strike on airfields based on enemy aircraft may turn out to be appropriate (or even the only possible one). The meaning and purpose of attacking airfields can be formulated as follows, with the utmost simplification: the irretrievable loss of aircraft and pilots in exchange for gaining short-term air superiority. Attacked enemy airfields and air units based on them will quickly restore their combat capability, but there are situations in war when a few days or even hours decide the outcome of an operation. That is why, before the start of major offensive operations, massive raids on enemy airfields were often carried out. The temporary decrease in the activity of enemy aviation achieved by this was a significant help to ground forces at the most difficult stage for them to break through the enemy defenses. Moreover, there were situations when attacks on airfields became the only possible means of armed struggle. For example, at the beginning of 1941, both

British and German bomber aviation switched to the tactics of night raids on enemy cities and military bases. Despite huge efforts (and some successes) in the creation and development of means of radar detection of aircraft in combat units, night fighters turned out to be powerless at that time in the confrontation with bombers invisible in the darkness of the night. Nothing else, except for extremely ineffective and leading to huge losses of raids on enemy bomber base airfields, then it turned out to be practically

impossible.

There are no exceptions to the rules (if they are real, correct rules). All apples always fall from the tree down to the ground. Not a single apple has yet flown to the sky. Aircraft, although they are significantly heavier

air, fly through the sky. But one should not conclude from this that the law of universal gravitation is inconsistent. It's just that, in addition to the force of weight, other forces also act on the aircraft. That's why he flies. Having done with this "philosophical digression", let's consider two real combat operations, which are often cited as evidence of the thesis of the high efficiency of strikes against airfields. Pearl Harbor. On the morning of December 7, 1941, Japanese carrier-based aircraft treacherously and without declaring war dealt a crushing blow to the American naval base with this poetic name ("Pearl Harbor"). Within an hour and a half, the US

Navy lost so many heavy ships (battleships and cruisers) that not every major maritime power had. At the same time, 188 combat aircraft were destroyed on the ground. After this unheard of disaster, the very word "Pearl Harbor" became a household word.

How did this become possible? Or, in other words, what was the reason for the unprecedentedly high (high in comparison with the average statistics given above) the effectiveness of Japanese aviation operations? The first and, strictly speaking, exhaustive answer is that statistics is the science of large numbers. The results of a single event can very strongly average. Returning to the history of the grandiose ocean war of 1941-1945, we can state that nothing like this, nothing remotely reminiscent of Pearl Harbor, has ever happened again. Neither on American nor on Japanese airfields. The exclusivity of this event is easily explained. First, differ from there was an unprecedented concentration of attacking forces. The island of Oahu - a tiny speck on the map of the Hawaiian Islands - was attacked from six aircraft carriers by 353 Japanese aircraft. These figures cannot even be closely compared with the detachment of forces that the Germans allocated on the morning of June 22, 1941 to strike at Soviet airfields (each of which attacked, at best for the

attackers, one, maximum two squadrons, i.e. no more than 15-20 aircraft - although in most cases, individual units or even individual pairs of aircraft participated in the raid). Secondly, there was a real surprise attack. The naval base at Pearl Harbor was in a state of constant (i.e., normal, not increased due to the threat of attack) alert. The Japanese aircraft carriers drifted at a distance of 200 nautical miles from the base and were not detected by patrol ships guarding the sea area. At 7.55 local time, the crews of the American ships stood in the morning formation - it was at that moment that they

bombs rained down. The reasons why the American command did not notice and / or did not draw the proper conclusions from the advancement of a powerful aircraft carrier formation of the Japanese fleet have been discussed many times and will be discussed in military history literature for a long time to come. Many versions have been expressed (including the readiness of the US top political leadership to sacrifice ships and people so that the fury of the American people "boils like a wave" and allows Roosevelt to overcome the resistance of the "isolationists" in Congress). Be that as it may, for the personnel of the base, separated from the Japanese islands by 5 thousand kilometers of ocean expanses, the attack was stunning

surprise.

These two circumstances - surprise and a huge "pinpoint" concentration of the forces of the attackers - make it possible to characterize Pearl Harbor as a diversion without great exaggeration. A sabotage of a huge scale and huge consequences, but just a sabotage, and not a typical military operation. The effectiveness of sabotage varies in a huge

range - from zero to phenomenal success. So, for example, on July 30, 1943, the Belarusian partisan Fyodor Krylovich installed two magnetic mines with a clockwork in the echelon of gasoline tanks at the Osipovichi station. The unsuspecting Germans placed the echelon next to another echelon loaded with ammunition. After all this exploded, the Germans lost 5 steam locomotives, 33 fuel tanks, 65 ammunition wagons, 12 food wagons, 8 tanks, 7 armored personnel carriers, a coal depot, and many station buildings. Traffic in this area was completely paralyzed for two days.

(116) It is unlikely, however, that there will be a sane person who needs to prove that not every one of the 200 thousand partisans of Belarus has achieved such success ...

The word "sabotage" is related to the debacle at Pearl Harbor in yet another way. The base command saw the main threat not in the sky (where no one expected the sudden appearance of hundreds of enemy aircraft), but in the sea, from which Japanese saboteurs could come ashore in the darkness of the night. Therefore, the aircraft at Pearl Harbor not only were not dispersed along the edges of the airfields, but, on the contrary, were concentrated in the center of the airfields under reliable protection. On the morning of December 7, 1941, this circumstance also contributed to the high effectiveness of the Japanese strike. A final

remark related to the history of Pearl Harbor relates to the casualties of the attackers. The losses were by no means negligible. Of the 183 aircraft of the first "wave" 9 were shot down, of the 170 aircraft of the second "wave" 20 were shot down (more

one tenth). In total, 29 aircraft were irretrievably lost, and another 74 were damaged. In total, 1 aircraft out of 12 that took part in the raid was irretrievably lost. Running a little ahead, we note that on June 22, 1941, the Germans irretrievably lost "from enemy action and for unknown reasons" 62 combat aircraft, i.e., on average, one aircraft for 65 sorties (although in this case more than half of the sorties were not related with attacks on airfields). The casualty rate is five times lower than that of the Japanese in the raid on Pearl Harbor. If Pearl Harbor was a

"pinpoint" one-time strike, in principle incomparable with the events of the longest day of the 41st year, then the operation "Moked" (which can be transferred from Hebrew as "center", "center of effort"), carried out by the Air Force Israel on June 5, 1967, the first day of the so-called "six-day war", is well worth considering in the context of our book.

During the day (the first bombs fell on Egyptian airfields and 7.45, the last planes returned to their bases by 8 pm, when real night falls in the Middle East in June), the Israeli Air Force in five "waves" completed 352 sorties and attacked a total of 18 Egyptian airfields. Based on the pilots' reports and aerial photographs, enemy losses were determined in the following figures: - Tu-16 bombers 30 out of 30; - IL-28 bombers 27 out of 27; -

MiG-21 fighters 90 out of 102; - MiG-19 fighters 20 out of 28; - MiG-17 fighters 75 out of 96; - fighter-bombers. "Su-7" 12 out of 16. Total 254 out of 299.

Attacks on the airfields of Syria and Jordan began in the afternoon. A total of 122

sorties were made and 8 airfields were attacked. Destruction announced:

- IL-28 bombers 2 out of 2; - MiG-21 fighters 30 out of 60; - MiG-17 fighters 20 out of 35; - Hunter fighters 20 out of 24. In total, 474

sorties were carried out for attacks on enemy airfields, during which 326 enemy aircraft were destroyed. Combat (excluding accidents for technical reasons) irretrievable losses amounted to 18 aircraft - within one day, the Israeli Air Force lost 9% of the total number of serviceable combat aircraft (Luftwaffe losses on June 22, 1941 as a percentage of the number of combat-ready aircraft were three times less) . In terms of the number of departures - 1

shot down on 26 sorties (2.5 times more than the Germans on June 22). The losses are very, very tangible, however, the command of the Israeli Air Force in their calculations proceeded from the inevitability of the loss of 20% of the

attacking aircraft. (149, 150) The reason why the Israeli command decided to resort to a tactic fraught with great losses is quite understandable - there was simply no other option. The inhabited (not counting the waterless and deserted Negev desert in the south of the country) part of the territory of Israel "within the borders of 1967" was a "densely populated beach" about 18-20 km wide. The flight time of a subsonic strike aircraft from advanced Egyptian airfields in the Sinai to Tel Aviv was 10 minutes. The invariably peaceful Soviet Union, among other things, provided its Middle Eastern friends with 30 Tu-16 bombers. In domestic literature, this aircraft is characterized as "medium long-range". Yes, for the mid-60s, a bomber with a take-off weight of 80–90 tons could be considered "average". Recall, however, that the American "flying fortress" B-17 had a maximum take-off weight of 27 tons, and the heaviest modifications of the German "Ne-111" weighed less than 14 tons ... Israel could not allow the appearance of such an armada over its densely populated cities, but practice of all wars and military conflicts of the 20th century, without exception, convincingly proved that no air defense is able to prevent a part of the attacking aircraft from breaking through to the target (in reality, the destruction of 10–20% of enemy aircraft could be considered a huge success). In such a situation, the Israeli Air Force simply had no choice but to try to destroy enemy aircraft before they could take to the skies. The Israeli Air Force has been preparing for a preemptive strike on Egyptian airfields for at least two years. The idea of the operation

was based on the idea of the priority destruction of the runways (runways) with the subsequent execution of the "ground-bound" aircraft. The location of the Egyptian airfields was no secret to Israel, as they were mostly former British airfields built in the 1930s-1950s. There were few airfields (more precisely, at the mercy of the Kremlin, a backward semi-feudal country had an unbelievably large number of combat aircraft). Although in total the Israeli Air Force appeared in the sky over 18 airfields, three-quarters of all sorties (267 out of 352) fell on the 7 main airfields based on Egyptian aircraft. In fact, the entire deadly armada was "tied" to two dozen runways. It was this circumstance that gave the Israelis a chance of success.

All types of reconnaissance established the location of airfields, runways, parking lots and shelters for aircraft. With some errors, but a selection of real aircraft and false targets (dummy models) was carried out. In the desert area, for the training of Israeli pilots, "runways" were marked on the ground, exactly corresponding to the real ones.

It was not the runway that was to be bombed in an arbitrary place, but strictly defined points, the destruction of which made it impossible to take off from the damaged runway in any direction. Each pair of pilots knew a specific point on a specific strip of a certain airfield that she was to attack, the direction of approach to the target, turn for the second approach, the direction of the third attack, etc.

The Mediterranean Sea provided significant assistance in ensuring the surprise of the first strike. The presence of a huge water surface allowed the first "wave" of Israeli aircraft to fly most of the route at an extremely low altitude of 30 meters - without automatic terrain tracking, this was only possible over the sea. The planes not detected by radars flew much further than the meridian of the target, then turned around over the sea and attacked the Egyptian airfields "from the rear", from the west (in relation to June 22, 1941, this is equivalent to the fact that German planes would have appeared over the border airfields from Minsk).

Unlike Pearl Harbor, where the Japanese struck with a huge "cloud" of aircraft, each "wave" of the Israeli Air Force raid was actually a "chain" of successive attacks of individual links (from 3 to 5 aircraft each). So, for example, the most important Egyptian airfield Abu Suer (27 Il-28 tactical bombers and 19 newest MiG-21 fighters were based there) was attacked at 7.45, 7.55, 8.10 during what is commonly called the "first wave". , 8.25, 8.40, 8.55, 9.10. Seven strikes at intervals of 10–15 minutes, 32 sorties. Each link dropped a bomb load on the runway, after which, in three passes, it shot planes from the onboard guns and went home, freeing up space for the next link. After the return of attack aircraft to the base, they were refueled at a frantic pace, refueled, ammunition and prepared for the next flight. The time standards for post- and pre-flight preparation established by aircraft manufacturers were reduced by 2.5 times. The second "chain" of strikes covered Abu Suer between 10 and 11 o'clock in the morning: another 18 sorties of four links. The last two planes attacked Abu Suer at 18:00. Total: 52 sorties on one airfield. The neighboring Fayyad airfield was attacked in four "waves": six links in the first "chain" (29 sorties in the period 7-45 to 9-10), 7 sorties in the second "wave",

4 in the third, 10 in the evening fifth "wave". A total of 50 sorties per airfield. Contrary

to popular misconception, in June 1967, not a single American-made combat aircraft was in service with the Israeli Air Force. Israeli military aviation at that time was a flying exhibition of the achievements of the national economy of France. There were "exhibits" of five different types, ranging from the hopelessly outdated Hurricane (the first - still with a direct subsonic wing - a serial French jet fighter; discontinued in 1954) to the latest supersonic Mirage. Fortunately for the Israelis, all five types of French aircraft were "old-fashioned" equipped with powerful cannon armament (from four 20-mm cannons on the Hurricane to four 30-mm cannons on the heavy twin-engine Votours), which was the best match for the tasks operations.

The main difference between the armament of 1950-1960 fighters from their predecessors from the beginning of World War II was not in the increased caliber of guns and / or the number of barrels, but in a fundamentally new sighting equipment. Semi-automatic gyroscopic sights (coupled on new aircraft with radio rangefinders) freed the pilot from the need to calculate (more precisely, intuitively guess) the necessary lead - all corrections related to the mutual three-dimensional movement of the aircraft and the target were made by automation, based on amazingly beautiful in their ingenious simplicity analog electro-mechanical computers. The new sights not only increased the probability of hitting, they changed the very "technology" of aerial shooting - it became possible to aim at long distances (up to 800-1000 meters), on intersecting courses. In fact, aviation small arms, which in the early 60s, other theorists hastened to declare an anachronism, gained a "second wind".

To destroy concrete runways, Israeli aviation used bombs of a very "modest" caliber (70-120 kg), but in the maximum possible quantity according to the performance characteristics of the aircraft. It was decided that a high probability of defeat was more important than the depth of the craters on the runway - the calculation was based on the fact that the ground services of the airfields would not be able to restore even the most minimal damage at the pace set by the continuously attacking Israeli aircraft. At the same time, special concrete-piercing bombs with a rocket booster were used to strike at especially important airfields. This ammunition, after being dropped at low altitude, was stabilized by a brake parachute, which ensured a meeting with the runway at a strictly defined angle; after that

the rocket booster "driven" the bomb body made of high-strength steel under the concrete coating, and only after that did the warhead explode. As a result, not a "hole" was formed on the runway, but a "mound" of rearing fragments of concrete pavement, after which the runway became absolutely "impassable" for multi-ton aircraft with a takeoff speed of 200-250 km / h.

And yet, the main circumstance that made possible the phenomenal success of the Moked operation was the extreme carelessness of the command and ... let's say politely - the low motivation of the enemy personnel. The Egyptian command (i.e., Soviet military advisers) did not learn the slightest lesson from recent military history, and the operation to "throw Israel into the sea" was planned as a kind of repetition of the Finnish ("winter") war in a hot climate. No one thought about a possible preemptive strike by an enemy "doomed to be slaughtered". The brand new MiG-21s dazzlingly sparkled with duralumin wings under the rays of the African sun - they did not even bother to paint them with camouflage paint (not to mention camouflage nets and shelters). The numbers of Israeli aviation losses also speak

volumes: in the first "wave" 8 aircraft were irretrievably lost, in the second - zero. The dynamics are very interesting and by no means trivial. At Pearl Harbor, everything was exactly the opposite: 9 Japanese aircraft were shot down in the first "wave" and 20 in the second. Awakened by a sudden strike on "peacefully sleeping airfields", American pilots "with ***the courage of blind despair and anger, no longer following any plan, out of order, entered into a single battle with enemy aircraft ...***" Something else happened at Egyptian airfields, and, judging by According to the reports of Israeli pilots, the second "wave" practically did not meet either anti-aircraft fire or missile launches. In the afternoon, the same situation was repeated in the skies of Syria and Jordan: 7 Israeli aircraft were shot down in the first strike, 3 in the second. It remains to be assumed that the "fighting spirit" of the Arab anti-aircraft gunners was no higher than the similar spirit of the tankers and infantrymen. Here it would be appropriate to recall that the organized resistance of the Arab armies was broken within two or three days, and the total duration of the "six-day war" was determined by the time it took the diplomats of the great powers to agree on the conditions on which Moscow agreed to recognize the defeat of its puppets. Concluding the brief review of the Moked operation, it should be

noted once again that all the numbers of Arab aircraft destroyed on the ground, given above, are based on the statement of one side. Yes, judging by the military operational result achieved (after June 5, not a single bomb

did not fall on the cities of Israel), the reports of Israeli pilots were not the usual "hunting stories" in such cases, and most of the runways were disabled for a long time. As for the number of aircraft actually destroyed on the ground, it could be somewhat less than declared. We are led to this assumption by the data posted on the official website of the Israeli Air Force that during the "six-day war" 60 enemy aircraft were shot down in air battles and three more aircraft were destroyed by Israeli air defense forces. ("60 enemy planes were shot down in dogfights. Three more planes were brought down by the Israeli AA forces"). Before being shot down in the air, these planes had to survive under a hail of Israeli strikes on June 5, and even be close to a serviceable runway ...

Thus, the unusually high (high in comparison with operations of the Second World War) effectiveness of strikes against airfields achieved by the Israeli Air Force on June 5, 1967, can be explained by the following factors: - attachment of jet aircraft

to concrete runways, the minimal damage to which made it impossible to take off multi-ton aircraft with takeoff speeds of 200 or more km/h; - the concentration of Arab aircraft on a relatively

small number of airfields; - lack of proper camouflage of aircraft; - careful long-term

preparation of the Israeli Air Force (including the accurate identification of all enemy airfields); - the surprise of the first strike, ensured by the careful preparation of the

attackers and the extreme carelessness of the defenders who did not intend to defend themselves; - extremely low activity of ground air defense of airfields; - a new

generation of airborne sighting equipment, which ensured both high accuracy of bombing on the runway and high efficiency of firing at aircraft;

- Significantly increased power of aircraft small arms. Returning to the events of June 22, 1941, we can unequivocally state that the first and last two factors could not have existed on that day in principle. The I-16 fighter of the latest (i.e., the heaviest) modifications had a takeoff weight of less than 2 tons and a takeoff speed of 130 km / h, a takeoff run of 210 m, a runway of 380 m. The runway for a fighter of this class could serve as a flat clearing, compacted with a skating rink or lined with easily removable metal panels. An aerial bomb weighing 50 kg (the most massive ammunition of the German

bomber aviation; the next caliber in the Luftwaffe was a 250 kg bomb, there were no "hundreds" at all) left a funnel with a diameter of 10-15 meters in the ground. Fifty mobilized men from a neighboring village could fill it up in half an hour. Manually. With the use of technology, it was even easier to restore the unpaved runway destroyed by the raid. That is why attempts to disable the airfield by destroying the runways were extremely ineffective in that era. Strictly speaking, they were engaged in it extremely rarely, and an attack on airfields primarily involved an attack on aircraft.

This circumstance alone makes it completely meaningless to directly transfer the results of June 5, 1967 to June 22, 1941 - the Germans could not "chain" Soviet aviation to the ground with one massive blow to the runways of airfields, in principle. This conclusion hardly deserves discussion. It is much more important to try to find out the real state of affairs with other success factors: the number of airfields, the dispersal and camouflage of aircraft, the surprise of the enemy strike (German aviation). These are the questions that will be addressed in the next chapter.

Chapter 23

We will not even start a discussion on the topic: "Did Stalin believe in an agreement with Hitler?" Not funny, stupid and disgusting. Those who wish can turn back a few pages and take another look at the long list of Soviet Air Force commanders who were arrested and shot on the eve of the war. Something, but excessive credulity was not included in the list of Comrade Stalin's vices. Of course, Stalin had detailed information about the concentration of

German troops near the borders of the USSR, of course, he was not an idiot (as he was portrayed by the entire domestic and, quite strangely, most of Western historiography, which spread stories about the fact that Stalin "was afraid to give Hitler a reason for an attack") and perceived the information quite adequately. Yes, many of his actions in the last days and hours before the start of the war are still incomprehensible to us. But this does not mean that Stalin is an idiot. It's just that our knowledge of the dark abysses of Soviet history is still very

very small.

As for the notorious "surprise attack", here it is necessary to clarify the terminology. There was no strategic surprise by definition. The Soviet Union, its army, the military industry (there was practically no other), the top military-political leadership of the country was intensely, tirelessly and adamantly preparing for the Great War. This is evidenced by hundreds of thousands of documents, evidenced by millions of living witnesses of the events. If this fact still needs to be proven to someone, then it is no longer worth proving ... There was also no operational surprise. In the second half of June 1941, the Red Army was in a state of immediate preparation for war. To the war that will begin in the

coming weeks (or even days). In June 1941, the imminent start of hostilities was not in doubt for almost anyone - from generals in Moscow to soldiers in the border units. Of the great many testimonies of the participants in the events, we will cite only one - the recently published memoirs of L.I. Toropova. (164) On the eve of the war, the young cadet Toropov studied flying at the famous, oldest in Russia, Kachinsky flight school. A few days before June 22, a lecturer came to the cadets:

... He introduced himself as a lecturer of the Central Committee of the CPSU. The lecture was sensible and informative. It was literally four or five days before the start of the war. And the end of his lecture went something like this:

Comrades, there was a TASS statement dated June 14, you probably know [about it]. Nevertheless, war with the Germans is inevitable and will be. But, you have no idea how close we are to this war!

This is how I finished the lecture. Of course, we do not given meaning...

Carefully prepared by Soviet pseudo-historical propaganda, the reader will easily continue the phrase: they didn't believe because the radio was shouting about the non-aggression pact, and everyone who didn't believe in this pact was dragged to the dungeons as "provocateurs". Alas, my friends, this time you did not guess. This phrase ends in a completely different way in the memoirs of an eyewitness and a participant in the events:

because for more than a year we were told: "There will be war with the Germans!"
There will be war! And despite the
agreements, we are already used to it. And I remembered these words of his only
when the war began.

Pay attention: not "the Germans will attack us", but "there will be a war with the Germans" ...
Now, from

memories (and memory can fail any person), let's turn to miraculously preserved (that is, not destroyed in a timely manner) documents. It turns out that starting from June 16–17, 1941, orders to put the troops on high alert were pouring in one after another. Order of the commander of the Baltic OVO No. 0052 dated June 15, 1941

of the year.

... From the first hour of hostilities, organize the protection of your rear, and immediately detain all persons who inspire suspicion and quickly establish their identity ... Disperse and camouflage aircraft at airfields in forests, bushes, preventing formation in a line, but maintaining full readiness for departure. Parks of tank units and artillery should be dispersed, placed in forests, carefully camouflaged, while maintaining the ability to assemble on alarm in a timely manner ... Army commander, corps commander and

divisions to draw up a calendar plan for the execution of the order, which will be fully completed by June 25 this year. G.

(50, pp. 11–12)

Directive of the Military Council of the Baltic OVO No. 00224 of June 15, 1941.

In the event of an enemy violation of the border, a sudden attack by his large forces or an overflight of the border by an air formation, I establish the following notification procedure ... The report should be sent through radio stations 11-AK or RSB on wave 156. For timely receipt of the report, the receivers of all formation headquarters from 17.6.41 should be on the wave 156...

(50, pp. 11–12)

Order of the commander of the Baltic OVO No. 00229 dated June 18, 1941

of the year.

In order to quickly bring the theater of military operations of the district to combat readiness, I ORDER: To

the head of the air defense zone, by the end of June 19, 1941, bring the entire air defense of the district to full combat readiness ... By July 1, 1941, complete the construction of command posts, starting from the battery commander (**anti-aircraft**. - M.S.) to the commander of the brigade area (air defense) ... Not later than the morning of 20.6.41, at the front and army command posts, throw out teams with the necessary equipment to organize communication centers on them ... Systematically check communications with command posts ... To outline and prepare teams of signalmen, which should be ready by the morning of 20.6.41, by order of the commanders of the formations, to take control of the communication centers approved by me ...

To determine on the site of each army the points for organizing field warehouses of anti-tank mines, explosives and to concentrate the anti-personnel property in organized warehouses by 21.6.41 Establish mobile anti-tank mine detachments in the Telsiai, Siauliai, Kaunas and Kalvary directions

struggle ... The readiness of the detachments by 21.6.41 ... The plan for the destruction of bridges to be approved by the military councils of the armies. Deadline 21.6.41... Select all gas tanks from the parts of the district (except mechanized and aviation) and transfer them 50% each to the 3rd and 12th mechanized corps. Completion date 21.6.41...

On the cover of Combat Documents Collection No. 34 (from which these orders are quoted from pp. 11-25) is a blue stamp: "Declassified." Number of the Directive of the General Staff on declassification and date: 30.11.65, 1965. For decades, the shamans of the official military-historical "science" knew - or at least should have known - the contents of the documents of June 1941, but at the same time they continued to tell us stories about a "sudden attack" and "a peacefully sleeping Soviet country..." Unfortunately, SBD No. 34 is the only collection of combat documents of

border military districts / fronts, which included at least several documents from the period before June 22, 1941. All other collections begin immediately on June 22, with a "surprise attack". Everything that preceded this notorious "surprise" was safely passed over in silence. However, taking into account the extreme level of centralization of decision-making in the Stalinist USSR, there is not the slightest reason to consider the situation in the Baltic OVO to be unique in any way. Commander of the PribOVO F.I. Kuznetsov (as well as his naval namesake N.G. Kuznetsov) acted in strict accordance with the instructions that they received from Moscow. Their neighbors received exactly the same instructions. It's just that the relevant documents of other districts either disappeared or were duly classified in good faith in a timely manner.

However, it is impossible to keep everything secret. In the most "stagnant years" (in 1977), the memoirs of Colonel Belov (commander of the 10th SAD - one of the three completely defeated air divisions of the Western OVO) were published about the first day of the war. Essay title: "Hot Hearts". The tone of the story is in line with the title. Nevertheless, the following information also fit on five pages of text: ***"On June 20, I received a telegram with an order from the commander of the district air force: put the units on combat readiness (emphasis added by me. - M.S.), prohibit vacations for command personnel, recall those on vacation in part ... The regimental commanders also received my order: to disperse the planes beyond the borders of the airfield, not to let the personnel out of the camp ... " (44)***

In the November issue for 1988, the Military Historical Journal (the official press organ of the USSR Ministry of Defense) published a report by the commander of the 7th Panzer Division (6th mechanized corps, Western OVO), Major General S. Borzilov, dated August 4, 1941. The commander of the defeated division, who emerged from the encirclement with a handful of soldiers, does not hide the fact that **"... On June 20, 1941, the corps commander held a meeting with the command of divisions, at which the task was set to increase combat readiness, that is, it was ordered to finally equip shells and magazines, put them in tanks, strengthen the security of parks and warehouses, check once again the areas where units are assembled on alert, establish radio contact with the headquarters of the corps. Moreover, the corps commander warned that these events should be carried out without fuss, not to tell anyone about this, to continue studies according to plan ... "**

The report of the head of the 3rd department (military counterintelligence) of the 10th army of the Western OVO dated July 13, 1941 was published in full only in 2008. It follows from the report that the 9th SAD of General Chernykh, adjacent to the 10th MAD of Colonel Belov, received exactly the same order: **"The 9th air division stationed in Bialystok, despite the fact that it received an order to be on alert from the 20th to the 21st..." (151)** And here are the memoirs of one of the senior commanders of the 9th SAD (lieutenant colonel V. Rulin, at the beginning of the war - commissar of the 129th IAP):

The operational intelligence reports of the headquarters of the Western OVO became more and more alarming Unexpectedly, on June 21, the entire leadership of the regiment was called to Bialystok **(i.e., to the headquarters of the 9th SAD. - M.S.)**.

In connection with the beginning of the exercise in the border military districts, it was proposed to disperse all the materiel available in the regiment before dark, to ensure its camouflage. When at the end of the day the regiment commander returned from the meeting to the camp, the work began to boil. All planes at the airfield were dispersed and camouflaged ...

(132)

Aviation units of 43 IAD and 13 BAD, stationed in the region of Minsk and Bobruisk, were located at a distance of hundreds of kilometers from the border. They could not become the object of the first "sudden" strike (and did not become such in reality). Nevertheless, there was intense preparation for hostilities. Neither these divisions nor their commanders were "peacefully sleeping". Major General G. Zakharov, commander of the 43rd IAD: **"In mid-June, all vacationers were recalled and returned to units,**

dismissals on Saturday and Sunday I canceled, the number of duty units and squadrons was increased ... " (55)

Not after, but before the first shots, the border was alerted and 13 dietary supplements. The division commander, Major General F. Polynin testifies:

On Saturday, June 21, 1941, a team of artists arrived at our air garrison from Minsk. Not so often we were pampered with their attention by figures of theatrical art, so the House of the Red Army was overcrowded (we note in brackets that on the evening of June 21, 1941, commanders of various ranks ended up in theaters and concert halls. As if on command. Or - on command. This is very a strange detail of the events on the eve of the war)... It was already past midnight when, after thanking our dear guests, we sent them back to Minsk. I just got home and went to bed when the phone rang. - Combat Alert! - I hear the excited voice of the duty officer at the headquarters. - Where did you report it? - From Minsk. The duty officer immediately handed me a telephone message from the District Air Force

Headquarters. I read: "Open the package, act

as prescribed." I pick up the phone, I contact the regimental commanders. They are already ready (that is, at 1-2 am at the "peacefully sleeping airfields" of 13 dietary supplements, no one was sleeping), they are waiting for a combat order. The conversation in cipher is extremely brief. Such and such goals ***(such a conversation could be brief only on the condition that the targets were reconnoitered in advance, studied, the routes of the first strikes were mapped.*** - M.S.) meeting with fighters there ...

(49)

Two words deserve the closest attention: "Open plastic bag".

The army lives according to charters, orders and instructions. This is her well-known weakness (and the basis of numerous jokes about stupid martinets). This is also its great strength - in a critical situation, the commander does not need to spend precious minutes on long reflections, you just need to clearly follow what is prescribed. The actions necessary in the first hours and days were developed, coordinated and approved in a document called "Mobilization, Concentration and Operational Deployment Cover Plan". Such plans have been developed in every county, every

army, each corps, etc. up to the regiment. The sealed package ("red package") was kept in the safe at the headquarters of each Red Army unit. Upon receiving a combat alert signal, commanders of all levels had to open the package and, without much deliberation, do what is written there. However, the top leadership of the Red Army (Timoshenko and Zhukov, and in fact Stalin), instead of a short order of four words: "to put into action a cover plan" - at midnight on June 21, 1941, they sent a long essay to the border districts, which was included in historiography under the name "Directive No. 1".

The discussion and search for the hidden meaning of this work has been going on for more than half a century. Some argue that the main thing in the Directive is the requirement **"not to succumb to provocations"**. Others reasonably object, pointing to the phrase **"to meet a possible German strike."** Still others rightly point out the ambiguity of the expression "meet a possible blow." How to meet? where to meet? at what frontiers? what forces? what are the plans? In fact, on the fateful evening of June 21, 1941, the top military-political leadership of the USSR invited their subordinates to solve the puzzle. Unravel in the conditions of the most severe shortage of time and with a very high probability of arrest and execution in case of an incorrect answer. And all this - instead of a simple, short and clear order to put the cover plan into action.

This mystery is great. As long as the relevant documents of the country's top leadership are securely hidden in departmental archives inaccessible to independent historians, there is no and will not be a convincing solution to the "mystery of June 21". Many suggestions have been made. I expressed my opinion in expanded form in the book "June 23: "Day M"". (152) Without digressing further into the discussion of complex military-political issues, let us turn to the consideration of real facts. The

decision to put the cover plan into effect was made at different times, in an unorganized manner, with an eye to possible "consequences". Nevertheless, in a number of districts, formations and units, "red packets" were opened BEFORE the first shots were fired at the border. In the context of this chapter, we are primarily interested in the situation in the Western OVO, whose aircraft suffered the greatest losses from the "sudden strike on airfields." A large number of documents indicate that the relevant orders were given and received in the ZapOVO. The Journal of Combat Operations (ZhBD) of the Western Front records:

At about one in the morning on June 22, a cipher was received from Moscow with an order to immediately bring the troops into combat

preparedness in the event of an expected German attack in the morning.

At about **02:00-02:30** (*hereinafter it is emphasized by me.* - M.S.) a similar order was issued in cipher to the armies, units of the fortified areas were ordered to immediately occupy the fortified areas. At the signal "Thunderstorm" (an *interesting coincidence with the title of the book by I. Bunich.* - M.S.), the **"Red Package" was put into action, containing a plan to cover the state border ...**

(10, p. 8)

The specified time (2 hours - 2 hours 30 minutes) is also confirmed in the documents of the units and formations of the district troops. So, in the report of the commander of the 7th TD Borzilov, already mentioned above, we read:

... **On June 22, at 2 o'clock**, a password was received through a communications delegate about a combat alert with the opening of the "red package". After 10 minutes, a combat alert was announced to parts of the division, and at 4 hours 30 minutes. parts of the division concentrated at the assembly point for combat alert ...

This report is fully confirmed by the memories of the commander
10 Belova GARDEN:

... At about **2 am on June 22**, I give the "Combat Alert" signal. It is transmitted by telephone, duplicated by radio. A few minutes later, **confirmation** was received from the three regiments about the receipt of the signal and **its execution**. From 74 ShAP, there was no confirmation of receipt of this signal (*yeah! Here they are, German saboteurs who cut all the wires on the entire front* - M.S.) Colonel Bondarenko flew to 74 ShAP on a Po-2 plane (*and in fact - as best as possible "deprive communications" of the air division, whose aircraft in themselves are an excellent means of communication.* - M.S.) **at 3 o'clock in the morning** and upon arrival announced a combat alert ...

No one slept on that fateful night and in the 9th SAD, which suffered the greatest losses, which is confirmed by unique eyewitness accounts. IN AND. Olimpiyev, born in 1922, one of the very few conscripts of 1940 who were lucky enough to live to see the Victory. In Bialystok, Sergeant Olimpiyev served as the commander of the telephone department of the headquarters of the 9th SAD. That is why, despite such a modest title, Vsevolod Ivanovich saw and knew

quite a bit of. In his memoirs (posted on the I Remember website), he writes:

... Returning from duty to the barracks late in the evening of June 21, 1941 with a leave of absence for Sunday in my pocket, I was already dozing when, through my sleep, I heard a loud command - "in the gun." He glanced at his watch, **it was about two in the morning**. The combat alert did not surprise us, since the next military exercises were expected ... It was almost dawn when our special truck, designed for unwinding and winding the cable, reached the military airfield on the outskirts of the city. Everything was quiet. **The 37-mm anti-aircraft guns disguised in caponiers along the airfield were striking (and how many lamentations there were about the lack of anti-aircraft guns at the airfields of ZapOVO. - M.S), whose crews armed with carbines were**

in helmets...

(125)

How typical was this picture for all other parts of the Air Force of the Western District / Front? The question is difficult. Front Commander General of the Army D.G. Pavlov (shot exactly one month after the start of the war), in his testimony during the investigation, gave the following answer: **"Kopets (commander of the ZapOVO Air Force. - M.S.) and his deputy Tayursky reported to me that aviation was fully put on alert and dispersed at airfields in accordance with the order of the People's Commissar of Defense.** (67) Yes, there were other situations on that strange night, other actions and inactions. In any case, at many airfields, a combat alert was announced at least an hour BEFORE the

enemy attack. And this circumstance alone radically distinguishes the events of June 22, 1941 from June 5, 1967, or Pearl Harbor. Is it a lot - an hour of time? What could be done in such time? **The question is reasonable, and the answer to it is very simple** - it is enough to carefully re-read the statutory norms: **bombing up to 1 hour 30 minutes. The terms of combat readiness of the air defense units on duty were 5-10**

minutes, the units as a whole - 2-4 hours. "(3) It is probably worth explaining what the constantly occurring

in reports and orders, the expression "duty link":

When on duty at airfields for fighters, it was three levels of combat readiness were established: No. 1, 2 and 3. They ensured the take-off of fighters: from readiness No. 1 - immediately: from readiness No. 2 - after 2-3 minutes in summer, after 4-6 minutes in winter; from readiness No. 3 - in summer and winter in 15–20 minutes.

This is aviation. The fastest branch of the military. These are not mechanized corps, kept in peacetime on a reduced staff, with less than half of the prescribed vehicles; the terms for bringing them to full combat readiness were calculated in days. ***“The Air Force was in easier conditions of mobilization, since the flight personnel of the units were mainly kept in wartime states. With the announcement of mobilization, it was required to call only a certain number of administrative, technical and service personnel. Therefore, the terms of combat readiness of the air regiments were no more than 2-4 hours.”*** This is not all I came up with. This was written in their collective work by military historians of the General Staff in 1992. (3)

Such was the case with suddenness. Now let's look at airfields.

According to the canonical version adopted in Soviet historiography, Luftwaffe aircraft attacked 66 airfields based on the Soviet Air Force. 66 airfields - are these ALL airfields in the western districts? Or most of them? Or at least one fifth of the total? Strictly speaking, 868 aircraft (637 bombers and 231 fighters) took part directly in the first attack on Soviet airfields, which attacked not 66, but 31 airfields. But let's not find fault with the petty "mistakes" of Soviet historians. We will try to understand the picture of the development of the airfield base of the air force of the western districts. Figures for the number of airfields rarely match even

within one book by one author. Perhaps this is due to the fact that in the era of aircraft with a take-off weight of 2 tons and a landing speed of 130 km / h, the very concepts of “operational airfield”, “landing site” were somewhat blurred, because in summer any even plane could be successfully used in this capacity. field after minimal preparation.

In the autumn of 1940, it was decided to increase the number of airfields in the Red Army Air Force to three per air regiment (1 main and 2 operational). This decision, like thousands of similar decisions of the Party and

government to prepare the country for the Great War, was stubbornly and persistently carried out. On March 24, 1941, the Central Committee of the All-Union Communist Party of Bolsheviks and the Council of People's Commissars of the USSR adopted another resolution on the construction and reconstruction of existing military airfields. Only in the territory of the western military districts it was supposed to build 672 (six hundred and seventy-two!) airfields. To implement such a grandiose construction program, the Main Directorate of Airfield Construction was specially created ... the NKVD. Yes, it was Comrade Beria and his countless army of Gulag slaves who were entrusted with this "construction of the century." And they worked hard: in the period from April 8 to July 15, in addition to the existing ones, 164 airfields were built in the western districts (25 in Leningradsky, 17 in the Baltic, 55 in the Western, 56 in Kiev and 11 in the Odessa districts); in total, by the end of 1941, 513 new airfields were built, including 138 with concrete runways. (23)

These are the numbers of new construction. Of course, military airfields in the invariably peaceful Soviet Union began to be built long before 1941. In total, as of June 22, 1941, there were 614 airfields in the western districts: (23)

- 86 in Leningradsky;
- 58 in the Baltic; - 213
- in the Western; - 150 in
- Kievsky; - 107 in
- Odessa. Particular
- attention should

be paid to the airfield network of the Western OVO, in which 24 air regiments accounted for a total of 213 airfields. For the most attentive, I can provide an archive link, which the compilers of owls. secret collection "Air Force of the Great Patriotic War in Numbers" is confirmed by the mentioned figures: TsAMO, f.35, op.28737, d.1, ll. 7, 33, 116, 292, 294.

Rumors that most of the airfields were at a distance of "a cannon shot from the border" are also extremely exaggerated. In reality, the problem was just different: to the west of the Riga-Minsk-Rovno-Mogilev-Podolsky line, i.e., in the territories of Eastern Poland and the Baltic States annexed in the 1939-1940s, there were relatively few airfields (few compared to the huge requests of the command of the huge Soviet aviation). Requests were determined by the general strategic plan of the Red Army. The exact details of this plan are still unknown, but in the Special Communication of the 3rd Directorate of the NPO No. 2 / 35064 dated June 25, 1941, among the description of the defeat of the North-Western Front, such an interesting line is found: "In connection with the withdrawal of units, there are not enough airfields, **so how airfields were mainly built in**

south-western places of the Lithuanian and Latvian republics with the calculation of the

offensive ... " (151) Directly in the border zone (20-30 km from the border), only field operational airfields of fighter regiments were deployed - and this deployment mirrored the deployment of fighter and assault groups of the Luftwaffe. By the way, in 1941-42, many orders were issued in which the commanders of fighter units were categorically required to bring airfields closer to exactly this (20-30 km) distance from the front line. Returning to June 22, 1941, we note that with the rarest, single exceptions, not a single airfield was - and could not be - subjected to artillery fire. The reason for this is extremely simple: the main Wehrmacht field artillery systems did not fire at such a range, and individual batteries and artillery divisions of high power were used to solve completely tinder tasks. The base airfields of the 9th Western Air Force SAD of the Western OVO (it was this division that lost the largest number of aircraft) were located near the cities of Bialystok and Zabłuduv (80 km from the border), Belsk (40 km from the border) and Ross (170 km from the border). As for the bomber divisions of the Air Force of the Western OVO (12 BDTs and 13 BADs), they were based in the region of Vitebsk, Bobruisk, Bykhov, at a distance of 350–400 km from the border.

At the advanced border airfields there were fighters, the weight of which (without fuel, pilot and ammunition) was 1.5–2 tons (the weight of a Volga car with passengers). A dozen strong men, without straining at all, could roll such an aircraft to the edge of the airfield in 10 minutes and shower it with spruce branches. However, if on the morning of June 22, 1941, the planes still had to be rolled and masked somewhere, this only meant that it was time to hand over the commander of these strong men to the tribunal. Order of the People's Commissar

of Defense of the USSR No. 0367 of December 27, 1940.

... It is necessary to realize that without careful camouflage of all airfields, the creation of false airfields and the camouflage of all materiel in modern warfare, the combat work of aviation is unthinkable. I

order: ... 3.

All airfields scheduled for sowing in 1941 must be sowed, taking into account camouflage and in relation to the surrounding area, by selecting appropriate herbs. Simulate at airfields: fields, meadows, gardens, pits, ditches, roads, so

to completely merge the background of the airfield with the background of the environment terrain.

The same by overseeding to carry out on all previously built airfields.

By July 1, 1941, complete the camouflage of all airfields located within a 500-km zone from the border (**hereinafter, it is emphasized by me.** - M.S.). To the

commanders of aviation divisions: 4.

Before April 1, 1941, draw up a scheme-plan for each airfield for camouflage, both in terms of sowing and for the placement of portable camouflage equipment. 5. By the

forces of the units, before April 1, 1941, prepare the necessary light portable camouflage material for each airfield ...

Order of the People's Commissar of Defense of the USSR No. 0042 of June 19, 1941.

... I order 1. By

1.7.41, sow all airfields with grasses to match the color of the surrounding area, paint the runways and imitate the entire airfield situation in accordance with the surrounding background. 2. Airfield buildings up to and

including the roofs shall be painted in the same style as the buildings surrounding the airfield. Bury the gas storages in the ground and carefully disguise them. 3. Categorically prohibit the linear and crowded position of aircraft, dispersed and camouflaged position of aircraft to ensure their complete non-observability from the air ... 7. Check the camouflage of airfields, warehouses, combat and transport vehicles

from the air by observation of the responsible commanders of the headquarters of the districts and photography. Any deficiencies discovered by them should be eliminated immediately...

Order of the People's Commissar of Defense of the USSR No. 0043 of June 20, 1941.

... I order: ... 3.

By July 1, 1941, mask all airfield structures in relation to the background of the terrain.

4. By July 1, 1941, camouflage tents in the camps of air units.

5. At camp airfields, aircraft should be dispersed under natural and artificial shelters, along the outskirts of the airfield, not allowing them to be placed in straight lines ...

So, a huge grouping, numerically many times superior to the enemy, is deployed at hundreds of airfields. All dispersal and camouflage orders have been issued. Actions on combat alert have been worked out many times. In many air units on the night of June 22, 1941, the alarm was announced BEFORE the appearance of the first German aircraft. Everything as in song..

And if a seasoned enemy climbs in on us, He
will be beaten - everywhere and everywhere ...

Chapter

24 HOW IT WAS - 1

The reader who has had the strength and patience to read hundreds of previous pages should already have a clear idea of the quantitative parameters of the Soviet Air Force grouping: the number of regiments, aircraft, airfields and flight crews. There was only one way to solve a problem of such magnitude as the destruction of the air forces of the western districts with one first strike: the massive use of nuclear missile weapons. But the Germans didn't have it yet. There were also no conventional weapons in sufficient quantities to strike at the same time on most of the airfields in the western districts. There were not even such forces that the Luftwaffe could concentrate on May 10, 1940 on the 300-kilometer front of the invasion of Belgium and France. It is worth noting that the greatest criminal and adventurer himself understood and even aloud admitted the exorbitance of his plan: **"... boundless expanses make it necessary to concentrate troops at decisive points. A massive introduction of aviation and tanks into battle is required in a decisive place. With such a huge space, the Luftwaffe is not able (here and below it is highlighted by me. - M.S.) to simultaneously process it in its entirety; at the beginning of the war, it can only dominate parts of a gigantic front " (12)** The destruction of "the entire aviation of the western districts" in the first hours of the war could not be, because it could never be. The most that the Luftwaffe command hoped to achieve was to cover from the air the shock tank groups "in the decisive places of the gigantic

front." The success achieved in reality exceeded the most daring expectations of the Hitlerite leadership. When the numbers of Soviet aircraft found on the ground exceeded two thousand, G. Goering himself (a fat and nasty, but still military pilot of the First World War) instructed a specially created commission to inspect the captured airfields in order to verify the reliability of the reports of German commanders ...

What happened in the first hours and days of the war?

The greatest losses in the first hours were suffered by the Air Force of the Western Front.

By the end of the first day of the war, losses here reached 738 aircraft, with losses on the ground - 528 aircraft and in the air - 210.

This is the classic version of Soviet historiography (the truthful newspaper Pravda of December 6, 1966 is quoted above) Fundamental monograph by M.N. Kozhevnikova (27) gives an important clarification to these figures: **"9 SAD lost 347, 10 SAD - 180, 11 SAD - 127 aircraft ... During the day, the enemy destroyed 387 fighters and 351 bombers of the Air Force of the Western Special Military District."** These figures,

wandering from book to book, categorically do not fit in with elementary school arithmetic. The three "mixed" (according to the then accepted terminology) air divisions of the first echelon of the Air Force of the Western Front (11 SAD, 9 SAD, 10 SAD) included only 172 bombers. Even if we assume that they were all destroyed on the first day (a rather rash assumption), then arithmetic requires that the number of fighters lost only in these three divisions be 482 units (347 + 180 + 127-172), but certainly not 387. If at least some of the bombers of the 9th, 10th and 11th divisions survived, then the number of fighter losses should arithmetically become even higher. And taking into account the losses of fighters of the 43rd IAD - even more ...

Apparently, it's time to ask the simplest and most important

question - and who saw it, is it "the destruction of Soviet aviation as a result of a sudden attack on airfields"? Where, in fact, did the strange hypothesis come from, which for more than half a century has been offered to us as a non-negotiable axiom? What are these "common figures" based on?

The territory of the "Bialystok ledge", in which 11, 9 and 10 SAD were deployed, was taken into "pincers" by infantry and tank divisions of the Wehrmacht in the first 3-4 days of the war. Encircled and during the disorderly retreat, dozens of generals, thousands of tanks and hundreds of thousands of soldiers went missing. Could any of the participants in this unparalleled disaster be able to compile a reliable register of aircraft destroyed at airfields by air strikes? With an exact list of damage received by these aircraft, with an indication of the time of the enemy air raid? And if such a "registry" exists, then why hasn't it been published over the past six decades? In the already mentioned, academically solid,

monograph by Kozhevnikov, after the figures for the losses of aviation on the Western Front, there is a reference ... to the popular book "Aviation and Cosmonautics of the USSR"! This is as appropriate as, for example, a reference to a Jules Verne novel in modern

monographs on the design of submarines. Marshal G.V. Zimin, in his work "Tactics in Combat Examples" intended for Air Force commanders, repeating the prescribed spell (***"the enemy managed to destroy up to 1200 aircraft, including 800 at airfields"***), gives a link ... to the propaganda brochure "The Military Glory of Soviet Aviation", released in 1953! And this despite the fact that at the end of Zimin's monograph there are several pages of continuous references to TsAMO ... Now let's move on from school

arithmetic to tactics and operational art. According to the canonical version, more than half (654 aircraft out of 1200) of all total losses on the first day of the war and two-thirds (528 out of 800) of all "ground" losses were lost in the three divisions of the Air Force of the Western Front. How could this be possible? Of course, only telegraph poles are even and the same, but one common reason for all Soviet aviation - a "sudden strike on airfields" - could not lead to such different results. If all this misfortune happened because Stalin, ***"fearing to give Hitler a reason to attack, forbade putting the troops on alert,"*** then why were the consequences of this evil (or stupid) Stalinist will distributed so unevenly? Why were losses in three divisions out of twenty-five half of the total losses? Strictly speaking, there were significantly more air divisions than 25. The entire grouping of the Soviet Air Force in the western theater of operations

included 48 air divisions. Having excluded the Air Force divisions of the Leningrad District from this list, excluding a large number of new formations that are being formed, excluding the DBA divisions (which, due to their geographical location, could not have come under the first blow), we come to the lowest figure - 25. Agree, they demonstrate strange logic Soviet (and Russian) historians who joined them: events in 3 objects out of 25 are considered "typical", and the situation in 22 objects out of 25 is considered a rare exception that does not even deserve a simple mention! We will go the other way. First, we will consider the course of events on the flanks of the Soviet-German front, then in the Kiev and Baltic districts, and only after that, having familiarized

ourselves with the typical picture, will we proceed to consider the circumstances of the unprecedented defeat of the first echelon of the Western Front Air Force.

LENINGRADSKY IN

The ground troops and aviation of the Leningrad Military District (Northern Front) did not conduct active combat operations in the first three days of the war. The actions of German aviation were limited to several flights of reconnaissance aircraft in the Leningrad region (one reconnaissance aircraft was shot down on June 23 by anti-aircraft artillery, another was damaged by anti-aircraft fire and crashed when returning to the airfield). On the same day, June 23, the first victory in the air for the Air Force of the Northern Front was won: the pilot of the 158th IAP, Lieutenant A.V. Chirkov, piloting the latest Yak-1 fighter at that time, shot down a German aircraft in the area between Pskov and Ostrov. The most significant episode of the first days was the aerial mining of the Kronstadt Bay, carried out at dawn on June 22 by the Junkers Ju-88 squadron from the KGr-806 "sea" group.

The Air Force of the Baltic Fleet was somewhat more active. Already at 6 o'clock in the morning on June 22 (that is, at the very time when the first emergency meeting was taking place in distant Moscow in Stalin's office), the KBF Air Force bombed Finnish ships that landed troops on the Åland Islands (the islands belonged to Finland, but had the status of a demilitarized zone) and fortifications on Korpo Island (30 km west of the Finnish city of Turku). However, this airstrike was practically ineffectual. The real war began in the early morning of

June 25, when the aviation of the Northern Front, together with the Air Force of the Baltic and Northern Fleets, launched a massive attack on military facilities (including airfields) in Finland. The factor of surprise, fully used by the Soviet command, was supplemented by an extremely "unfortunate" geography for the defenders. Most of the Soviet bombers hit targets from the Gulf of Finland. The Finns could not place hundreds of observation posts of the air surveillance and warning service (VNOS) on the water, there were no locators in service with the impoverished Finnish army at all; as a result, during the first raids, the air raid siren often sounded after the bombs exploded. Without digressing for a second to a discussion of the political causes that led to the events of June 25, let us consider the course and outcome of this - as Soviet historians claimed - "the first multi-day operation of the Soviet Air Force."

In the monograph repeatedly mentioned above, Major General of Aviation, Doctor of Sciences, Professor M.N. Kozhevnikov ("Command and Headquarters of the Air Force of the Soviet Army in the Great Patriotic War"), we can read the following:

Early in the morning of June 25 , 236 bombers and 224 fighters delivered the first massive strike against **19 airfields** . As a result, Soviet pilots successfully bombed aircraft stands, fuel and ammunition depots. **41 enemy planes** were destroyed at the airfields . Our aviation **had no losses**. In the next five days, several more effective strikes were delivered on the same airfields and those newly discovered by air reconnaissance. According to aerial photographic control, Soviet pilots, having attacked a total of 39 airfields, made about 1,000 sorties, destroyed and disabled **130 enemy aircraft**. The command of the Nazi troops in Finland and Northern Norway was forced to withdraw its aviation to distant rear airfields ...

(27)

Agree, this text largely coincides with the standard description of the first strike of the Luftwaffe on Soviet airfields. And the quantitative parameters (460 aircraft in the "first wave") are quite comparable with the actions of the 1st Luftwaffe Air Fleet in the skies of the Baltic. The difference is found only in the results. Even if we take the above figures on faith, it turns out that the Soviet Air Force spent 1000 sorties in order to destroy 130 enemy aircraft in six days (and not at all in the first six hours!) Already this arithmetic is somehow poorly combined with the legend about the inevitable "1200, of which 800 are on the ground."

The documents of the Air Force Command of the Northern Front, stored in TsAMO, and the works of modern Finnish historians paint a completely different picture. The only word of truth in Professor Kozhevnikov's work is the name of the month (June). Everything else - against the background of real facts - looks like an example of "black humor".

In fact, the operation lasted exactly two days, and already on the second day (June 26), the bomber units of the Air Force of the Northern Front carried out only a few reconnaissance flights over Finnish territory. The total number of airfields actually based on Finnish aviation, which became the target of a bomb attack, was seven. Only at one airfield (in the city of Turku) was a single aircraft of the Finnish Air Force put out of action. By a strange twist of fate, it turned out to be a captured Soviet SB bomber. All other "attacks on airfields"

were either completely ineffective, or led to heavy losses attackers.

One of the most dramatic episodes of this kind was the Soviet air raid on the Finnish Joroinen airfield. At 11:45 a.m., a large group (14 or 15, according to various sources) of SB bombers from the 72nd BAP at a relatively low altitude (1000 m, according to Finnish data) approached the airfield. The tactically competent actions of the regiment command were supplemented by an element of luck - the bombers approached the airfield at the very moment when the 2nd squadron of the LLv-26 fighter group, after a long patrol in the air with empty tanks, landed on the airfield. In parentheses, we note that it is precisely this situation - a raid on an airfield during refueling of planes returning from patrols - that is often used in Russian historiography to explain the colossal "ground" losses of the Soviet Air Force: the Germans allegedly always arrived "at the wrong time ..." the bombing of the Joroinen airfield is also completely "at the wrong time" (from the point of view of the Finns). Yes, only the reaction of the Finnish fighter pilots was completely timely and clear.

Two "fiats" of the duty link immediately took to the air and attacked the enemy many times outnumbered. As a result, three bombers were shot down directly in the area of the airfield, and the rest, randomly dropping bombs, turned back. A few minutes later, the 3rd squadron LLv-26, called by radio, intercepted the bombers of the 72nd BAP near the village of Kerisalo (12 km southeast of Joroinen). In the ensuing air battle, the strike group 72 BAP was finally defeated. Judging by the report of the commander of the Finnish squadron, Lieutenant U. Nieminen, by the end of the battle only four "SB" survived, "**one of which was trailing a smoky plume.**" In fact, Finnish fighters shot down not 10 (as they stated), but 9 bombers of 72 BAPs. The tenth "SB" was already shot down over Soviet territory by a Soviet fighter. Among the dead was the commander of the squadron 72 BAP Captain Polyakov. The Finnish fighter group LLv-26 did not lose a single aircraft that day - neither in the air nor on

earth.

In just two days of operations, the Northern Front Air Force and the Baltic Fleet Air Force irretrievably lost 24 bombers. (142) There was no relocation of Finnish aviation "to distant rear airfields" at all. Absolutely fantastic figures ("**39 airfields**", "**130 enemy aircraft**") cannot be even remotely connected with any real events ...

In general, in June, the 41st troops of the Northern Front and its powerful aviation continued to work out point by point the already hopelessly outdated pre-war cover plan. The breakthrough of German tank divisions to Siauliai, Kaunas and Vilnius did not have any visible impact on the decisions and actions of the Soviet command in Leningrad. And it's hard to say - did the command of the Northern Front know about the catastrophic development of events in the zone of the neighboring front? From the standpoint of today, this question sounds wild, and yet - on June 24, on the third day of the war, the headquarters of the Northern Front issued Combat Order No. 5. Paragraph 3 of this document read: ***"The experience of the first days of the war showed that the initiative of the command staff plays a huge role in the fight against the Germans. Thanks to the initiative shown, it was possible to stop the advance of the German troops on the Western and Southwestern fronts, with the exception of one sector, where the Germans managed to advance up to 20 km, thanks to the huge superiority in forces."*** (153) Let's repeat once again - this is not the text of an editorial in

the district circulation and not an exercise in "black humor". This is the combat order of the front headquarters. A document marked "Sov. secret", which the commanders of all levels had to be guided in their practical actions. Consoling (or deceiving) themselves and their subordinates, the command condemned the aviation of the Northern Front to passively waiting for the Germans to break through to the Western Dvina (Daugava). The waiting ended on the evening of July 1, when large groups of 2 SAD bombers launched the first strikes on German mechanized columns. (154) Unfortunately, these columns were already in the Kraslava region (40 km east of the Daugava), and by that time only the aviation of the North-Western Front (the former Baltic OVO) remained

memories...

If the main forces of the Air Force of the Leningrad Military District began hostilities against the German troops with a great delay, then on the extreme northern flank of the vast district, the war in the sky began with a significant "advance". For the first time, German reconnaissance aircraft were fired upon by anti-aircraft artillery of the Main Base of the Northern Fleet (Polyarny - Murmansk) at 20:50 on June 18, 1941. These were probably the very first artillery salvos of the war. On June 19, at 11.32, anti-aircraft batteries opened fire on the German Junkers Ju-88, which passed over the Main Base at high altitude. 240 shells were used, alas, to no avail. June 20 at 16.45 another unknown aircraft was fired upon by anti-aircraft artillery of the Northern Fleet in the sky over Severomorsk. (155) It is worth noting that there is no trace of the notorious "Stalin's order forbidding the shooting down of German reconnaissance aircraft" in

documents and real events are not detected. Massed fire was fired at the violating aircraft, and if they were not shot down, it was by no means due to excessive peacefulness. On June 22, German

aviation units and individual aircraft bombed ships, bases and airfields of the Air Force of the Northern Fleet - without any tangible result. The first of a series of effective retaliatory strikes was struck on June 24 by the "nine" "SB" from the 72nd SAP. After the bombing of the German Hebukten airfield (near the Norwegian city of Kirkenes), a fire was observed at the airfield, and according to the fleet's radio reconnaissance, "**at 18.53, the Kirkenes radio station notified its aircraft about the damage to the airfield.**" When returning from a mission, one "SB" was shot down by German fighters. On the same day, the first victory in an air battle was won: Senior Lieutenant B. Safonov (the future best ace of the polar sky) shot down a German Junkers-88 from the KG-30 bomber group in an I-16 fighter at 19.40. In the next ten days, the commanders of the bomber (H / KG-30) and fighter (IV / JG-77) air groups of the Luftwaffe died in air battles.

In the early morning of June 25, eight SBs from the 72nd SAP flew out to bomb the Finnish Luostari airfield, to which by that time the only 1./JG 77 fighter squadron in the Arctic had been relocated. Low clouds and fog prevented the task from being completed, but the first strike was followed by following. Before the end of the day, Luostari was attacked by small groups of aircraft five more times. Both sides did not suffer aircraft losses (except for one "SB", which lost its orientation, which led to an emergency landing in a deserted tundra). The Luostari airfield was not

the only object of air attacks on 25 June. Aviation of the Northern Fleet tried to bomb the Norwegian port of Kirkenes, but, having met with heavy fog, returned to the base. The Finnish port of Liina-hamari in the Petsamo region was bombed. On the evening of June 25, the Fleet Air Force bombed the distant Norwegian airfield Banak, where German bombers were based. June 26, 1941. The Air Force of the Northern Fleet carried out single and group raids on Petsamo, Kirkenes, Luostari and Vadsø. Bombers from the 137th BAP of front-line aviation made two long-range raids deep into Finland and bombed the airfields of Rovaniemi and Kemijärvi (more than 400 km in a straight line from Murmansk). Alas, the long-range reconnaissance unit of the Luftwaffe, based in Rovaniemi, did not suffer losses in aircraft. The actions of German aviation were somewhat more effective. On June 29, during a raid on the Vaenga airfield, 6 Soviet aircraft were destroyed on the ground. In total, in June 41, the losses of Soviet aviation in the Arctic amounted to 38 aircraft,

8 of them were at airfields. The most fierce battles unfolded in July 1941 - the Germans desperately rushed to the port of Murmansk and the railway connecting the Arctic with the mainland. In the late evening of July 3 (the word "evening" in this case means only time - the sun does not set beyond the horizon in those parts in July), eight Junkers, under the cover of six Messers, once again tried to attack the Soviet Vaenga airfield. In the air battle that ensued, "donkeys" and "seagulls" shot down two enemy aircraft (which is confirmed by German documents), without irretrievably losing a single aircraft - either in the air or on the ground. Running a little ahead, we note that the Germans made the largest raid on the Vaenga airfield on August 6 - 36 Luftwaffe bombers attacked the airfield in five echelons from different heights and directions. The result - one "Pe-2" was destroyed, three more aircraft were damaged.

On July 7, the aviation of the Northern Fleet delivered a tangible retaliatory strike. Nine SBs from the 72nd SAP bombed the Hebukten airfield. From a height of 3 km, 36 FAB-100s, 12 incendiary bombs and cassettes with small-caliber fragmentation bombs were dropped onto the airfield. According to the reports of the crews, there was an enemy (German documents confirm the loss of two aircraft). (133) Summing up a brief review of the actions destroyed 15 aircraft and losses of the Air Force of the Northern Front and the Northern Fleet, we can draw a very definite

conclusion: in the northern latitudes, the magic wand called "strike on airfields" resolutely refused to work - both in Soviet and German hands. In the Arctic, the total losses of Soviet aviation (from all causes, including accidents) in July 411 amounted to 80 aircraft, of which 21 aircraft were lost at airfields - exactly one tenth of the initial strength of the group. And this is not in one day, but in a whole month of fighting.

ODESSA IN

On the southern flank of the war, Soviet aviation in the Air Force of the Odessa District (Southern Front) and the Air Force of the Black Sea Fleet consisted of 53 squadrons (640 crews) of fighters and 37 squadrons (290 crews) of bombers. The Germans (the 4th Air Corps of the 4th Luftwaffe Air Fleet) had at their disposal 12 squadrons (150 crews) of fighters and 12 squadrons (100 crews) of bombers. The low staffing of the Luftwaffe bomber units is not accidental - the KG-4 and KG-27 squadrons had pretty much fought before on all other fronts and

suffered significant losses (for example, in the II / KG-4 group, with a staffing strength of 40 aircraft, there were only 24 Heinkels, of which 8 were combat-ready). In addition, from the first hours of the war, formations of the Romanian aviation took part in the hostilities (in total, they had 8 squadrons of fighters and 11 squadrons of bombers). If we do not take into account the performance characteristics of the aircraft of the Romanian Air Force and the level of training of the flight crew, then the presence of the Romanian aviation reduced the arithmetic superiority of the Soviet side to "only" twofold.

In the early morning of June 22, 1941, an armada of various aircraft appeared in the sky over the airfields of the Odessa District (German Heinkels and Messerschmitts, English Blenheims, Italian Savoia Marchetti, French Potezes, Polish bombers PZL-37 "Moose" and PZL-11 fighters). The enemy attacked 6 airfields (out of a total of 107, including operational ones), on which units of three regiments of the 20th SAD (4 IAP, 55 IAP, 45 BAP) and one regiment of the 21st SAD (67 IAP) were based. Thus, 4 out of 12 regiments that were part of the district air force were subjected to enemy strikes. The enemy did not bomb Odessa and Chisinau in the first days of the war (the Romanian dictator Antonescu, for political reasons, did not want to start his "crusade for the liberation of Bessarabia" from the bombing of residential areas of densely populated cities).

Soviet pilots and anti-aircraft gunners put up a tough rebuff everywhere. Romanian aviation lost irrevocably 11 aircraft, including 9 twin-engine bombers. (156) The Germans irretrievably lost one "Messer", shot down in the area of Balta; at least three Heinkel-111s were damaged (these figures may be somewhat underestimated, as losses on June 22 could be reflected in Luftwaffe documents in the following days). In the reports of Soviet fighters, of course, significantly higher numbers are mentioned, but even a dozen combat aircraft destroyed in one day was a significant loss for the enemy (primarily for the small Romanian Air Force).

The fighters of the 67th IAP were the most active that day. The pilots of the regiment made 117 sorties (an average of 2 per serviceable aircraft - this is a very high figure for the Soviet Air Force) and announced 18 enemy aircraft shot down. Own losses amounted to 6 aircraft, of which only one can be classified as "destroyed by the enemy at the airfield" (during the takeoff run, the I-16 fell into a crater from an air bomb explosion and turned over). The 4th IAP did not lose a single aircraft on June 22, however, and the combat successes of this regiment, which adopted 60 MiGs, were very modest (one Blenheim was reliably shot down). However, this

could also be due to the lack of a worthy enemy - the regiment was based in the Chisinau - Grigoriopol region, where enemy aircraft did not show much activity.

There was not a single irretrievable loss in the 55th IAP, although at least three "flashes" were damaged during an enemy raid on the Balti airfield. The heaviest losses of the day were the loss on the ground of 5 bombers (3 "SB" and 2 "Pe-2") from the 45 BAP. (156) In general, the irretrievable losses of the Air Force of the Odessa Military District amounted to a little more than one percent (!) of the initial number of combat aircraft. In total, taking into account the damaged and training machines, the losses of the district air force can be "reached" up to 25-30 units. Of course, domestic historians could not endure such a violation of the myth of the "first annihilating strike on airfields". And now, in the book of D. Khazanov of the 2006 model, the phrase appears: ***"The losses turned out to be much greater than indicated in the initial report (23 aircraft). According to German ... data, only the aircraft of the 4th Air Corps shot down 16 Russian aircraft and destroyed another 142 on the ground."*** (156)

With an ellipsis, I replaced two remarkable words in my revealing frankness: ***"clearly exaggerated."*** There is no need to argue with this definition - the pilots' reports on the number of aircraft they destroyed on the ground were "hunting stories" in the most unbridled sense of this expression (above, in Chapter 22, the figures of the declared and real "ground" losses of the Luftwaffe were given). Why was it necessary, having the reports of the commanders of the Soviet air regiments on the number of sorties and losses (it is to them, with the indication of the numbers of archival files, that D. Khazanov refers to in his book), to drag the stories of the Munchausen from the Luftwaffe

"in the line"? The appeal to the "hunting stories" of German pilots is already a new word in the struggle for the preservation of a mossy myth. The traditional approach in this case was different: "the myth is strengthened by the myth." In hindsight, such a "legend" was developed: the command of the Odessa Military District allegedly was not afraid to violate the notorious "Stalin's ban" and, on its own initiative, put the district's aviation on alert, dispersed and disguised itself. That is why the losses from the first strike on airfields were minimal.

Alas, this version is false on the one hand, and erroneous on the other. It is false in the sense that "collective Stalin" (i.e., the top military-political leadership of the USSR) in the last days before the start of the war sent one after another directives on increasing combat readiness, on camouflaging and dispersing aviation to all districts without exception, and ALL Air Force commanders not only received these encryptions, but also reported on them

fulfillment! The idea that orders were carried out better in the Odessa District than anywhere else is simply erroneous.

"... Despite the sufficient time reserve from the moment the alarm was announced to the enemy's raid, the units still could not escape from the blow with the least losses and inflict damage on the enemy. The enemy left with impunity, and we suffered heavy losses on the ground due to criminal negligence and disorganization The dispersal of the material part was unsatisfactory in all regiments Disguise, it can be considered, no; especially bad in the 55th IAP ... " These are the lines from the order in which the comm

On the 20th CAD, Major General Osipenko summed up the results of the first day of the war. (156)

How does this damning assessment fit in with the rather optimistic picture we described above? Agrees perfectly. Everything is relative. The commander of the 20th SAD compared the actions and achievements of his subordinates not with the legend about the "destroying the first strike of the Luftwaffe" (how could he know it on the evening of June 22?), but with the requirements of the Charters and Instructions, the tasks and real capabilities of the division entrusted to him. 20 SAD is the largest air division in the Odessa District (325 aircraft as of June 1, 1941) and the best armed (122 of the latest MiG-3s in two fighter regiments). If, after a collision with such a colossus, the "flying aviation museum" of the Romanian Air Force was able, having lost a dozen aircraft, to return to its bases, then this could well be assessed with the words "the ***enemy left with impunity ...***"

Another touch in the picture of "extraordinary organization" in the Air Force of the Odessa Military District can be the Soviet Su-2 aircraft shot down on the first day of the war by Pokryshkin (yes, our best ace, three times Hero of the Soviet Union A.I. Pokryshkin began his combat career in 55 IAP, the one where "there was no disguise at all"). The plane belonged to the 211th BAP of the same 20th SAD, but the "Bolshevik conspiracy" reached the point that no one showed this bomber, new to Soviet aviation, even in the picture!

After the obvious failure that befell the German-Romanian aviation on June 22, the activity of combat operations in the air decreased markedly. The parties gathered forces, conducted aerial reconnaissance and exchanged sporadic strikes of small groups of aircraft. Incomparably more significant events took place in those days at the airfields of the Crimea.

The reader familiar with Russian memoirs and historical journalism should be familiar with The Legend of Admiral Kuznetsov and Sevastopol. Summary of the legend: People's Commissar of the Navy N.G. Kuznetsov "was not afraid to violate Stalin's ban" and gave the fateful

an order to put the fleet on alert, as a result of which the first German air raid on Sevastopol was successfully repulsed, and with heavy losses for the aggressor. A little more detailed consideration of the factual side of the case reveals interesting details. Firstly, the directive of the People's Commissar of the Navy, sent at 01.12 on June 22, 1941 to the command of the fleets, almost verbatim repeated a similar Directive ***No. provocative actions that could cause major complications ... carefully mask the increase in combat readiness ... do not carry out any other measures without special orders ...***) Secondly, on that fateful night, there was no less order in the fleet, but no more than in other military branches Armed Forces of the USSR. At the main base of the Black Sea Fleet, events unfolded as follows. At 2.15 on June 22, the air defense headquarters of the

Black Sea Fleet ordered the introduction of a blackout regime in Sevastopol. For a full guarantee, the "main switch" of the city's energy supply was centrally turned off. Sevastopol plunged into the pitch darkness of the southern summer night, in which the lights of two lighthouses shone dazzlingly: Inkerman and Chersonesos. Wired communication with them was interrupted (presumably by saboteurs). The messenger from the headquarters of the fleet did not reach the Inkerman lighthouse, and the lighthouse, the visibility range of which was 24 nautical miles, continued to burn, confidently unmasking the city and port.

At 2.35 am on June 22, the RUS-1 radar station at Cape Tarkhankut detected an air target coming from the west. At 03:05 sound direction-finding stations recorded the noise of aircraft engines at a distance of 20 km from Sevastopol. The technique worked flawlessly. It was more difficult with people. Commanders of all ranks began to feverishly find out who could be responsible for making the decision to open fire. For some reason, the commander of the Black Sea Fleet, Vice Admiral Oktyabrsky, began calling Moscow, the Chief of the General Staff Zhukov, although the fleet was by no means subordinate to Zhukov. The operational officer on duty at the fleet headquarters (that night was the flagship chemist of the Black Sea Fleet, captain of the 2nd rank N.T. Rybalko), in turn, received a good instruction from Admiral Oktyabrsky: "Keep in mind that if there ***is airplane, you will be shot tomorrow.***" If you believe the memoirs of Rybalko himself, he and the chief of staff of the fleet, Rear Admiral I.D. Eliseev nevertheless decided to open fire on unknown aircraft. However, I.S. Zhilin (at that time - the commander of the air defense of the fleet) in his memoirs claims that neither

the chief of staff of the fleet, nor from the chief of staff of the Air Force of the Black Sea Fleet, Colonel Kalmykov, he could not get any specific instructions, and he himself, at his own peril and risk, ordered the commanders of the air defense units "to consider all aircraft that appear in the Sevastopol area as enemy aircraft, illuminate them with

searchlights **and open fire on them.** The first bomber appeared over Sevastopol at 03:13 on 22 June. He was discovered and illuminated by searchlights, but at the same moment an order was received to turn off the searchlights and not open fire. Chief of Staff of the 61st Anti-Aircraft Artillery Regiment I.K. Semyonov explained this by an order from the air defense headquarters of the fleet, but Zhilin points to the fuzzy actions of the regiment commander himself ... Be that as it may, four (according to other sources - 5 or even 9) German Heinkel He-111 bombers from the KG-4 air group. The planes approached the target one at a time, with long time intervals (15–25 minutes) and dropped bottom magnetic mines by parachute. Anti-aircraft artillery of Sevastopol air defense used up 2150 shells. In addition, anti-aircraft artillery of the ships of the Black Sea Fleet fired at German bombers. An entry in the Combat Log and the testimonies of many participants in the events indicate that one Heinkel was shot down and fell into the sea at 4.10, however, judging by German documents, group II / KG-4 had no irretrievable losses that day. (158) Such was the real picture of the events of June 22, 1941 in Sevastopol. In the

memoirs of one of our respected naval commanders (whose last name we will delicately keep silent about) we read: "**At a quarter past three, the powerful beams of the searchlights cut the cloudless starry sky and swayed like pendulums, feeling the sky, over which, growing with every second, a monotonous rumble spread. Finally, a terrifying armada of low-flying aircraft appeared from the sea. Their endless rows of crows** (emphasized by me. - *M.S.*) **alternately swept along the Northern Bay ... The gloomy silhouettes of still unknown bombers either flashed in the beams of searchlights, then disappeared in the emptiness of the sky ... "**

"History has given us little time." It was this phrase that Hitler was supposed to utter on the evening of June 21, 1941 (and if he had also guessed to shoot himself that very evening, without waiting for April 30, 1945, the whole world would have been much better off). The Luftwaffe, whose formations fought from Brest on the Bug to Brest on the Atlantic coast of France, from North Africa to Northern Norway, did not have "endless rows of crows" of aircraft. Even to strike at such an important target as the Main Base of the Black Sea Fleet, the Germans could not allocate at least one

bomber squadron in full force. The Germans did not have fighters capable of covering bomb carriers on a long-range raid to the coast of Crimea in the summer of 1941 at all. For this simple reason, the "first devastating strike" on the ships, bases and airfields of the Black Sea Fleet did not

took place.

The first blow (it would be more correct to say "mosquito bite") of the Luftwaffe in June 41 was the last. The very next day, the Germans in this direction were not up to night flights to Sevastopol. The destruction of the Romanian oil fields in Ploiesti and the most important

Black Sea port of Constanta (a significant amount of Romanian oil exported through it) was invariably present in the plans of the Soviet aviation command. The Air Force of the Black Sea Fleet was the first to start this task (as for the Air Force of the Southern Front, which included 5 bomber regiments, 192 crews, 220 aircraft, they did not make a single sortie to Ploiesti or Constanta - and this despite the fact that the distance 300-350 km to these objects made it possible to use any bombers, including the light Su-2). The first raid on Constanta took place already on the night of June 23. Three DB-3f bombers from the 2nd MTAP and four SB bombers from the 40th BAP of the Black Sea Fleet Air Force took part in it. Several dozen high-explosive bombs were used up, up to and including the FAB-500.

True, the

bombing strike, inflicted from behind the clouds from a fairly high altitude (from 3.5 to 5 km), did not cause any significant damage in the port of Constanta; a significant part of the bomb load fell into the sea. On the morning of June 23, the first (the only and last for the entire summer of 1941) truly massive blow was dealt to Romanian targets. 60 naval aviation bombers (33 DB-3 and 27 "SB") took part in the raid on Constanta. Among other objects, the Mamaia airfield closest to Constanta was also attacked, however, without significant damage to the Romanian aircraft. In total, during June 23, at least 88 sorties were made to bomb Constanta and

Sulina (another Romanian port), from 42 to 53 tons of bombs were dropped (according to various authors), including 54 FAB-500. (156, 179) Two ammunition depots exploded in Constanta, numerous fires started. All Soviet aircraft, except for one "SB" shot down by a Romanian fighter, returned to their bases. Not to mention the huge, without exaggeration, the strategic importance of Romanian oil to support deadly activities

of the German military machine, everything connected with oil (oil fields, refineries, storage facilities for petroleum products) is the most "tidbit", the most coveted target for bomber aircraft. Oil is on fire. It burns with a bright flame, and this flame made it possible to solve the problem of targeted night bombing, almost insoluble for the technology of the early 40s. The main thing is to ignite the enemy object well and for a long time. The Germans also understood this -

but history gave them little time. And the "royal Romania", which in 1940 went over to the side of the fascist "axis", was given even less time. As a result, Constanta's ground air defenses had 18–20 flak batteries and a dozen searchlights; Air defense of the fire hazardous Ploiesti - also about 12-15 searchlights and 30 anti-aircraft batteries. (156) One battery is, as a rule, four guns firing according to data from one fire control device (POISO). Thus, about 80-120 guns looked into the sky of Ploiesti or Constanta.

Is it a lot? Ground air defense of Baku was armed with 420 medium-caliber guns, 320 small-caliber guns and anti-aircraft machine guns, 564 searchlight stations. The 2nd Air Defense Corps, which covered Leningrad, was armed with about 600 85 mm guns, 246 76 mm guns, 60 small caliber guns, 230 anti-aircraft machine guns and 483 searchlight stations. By the beginning of the first German raids, on July 22, 1941, the Moscow air defense system had 1,044 anti-aircraft guns (mostly 85 mm), 336 anti-aircraft machine guns, and 618 searchlight stations. (41) And this despite the fact that the main means of Soviet air defense was not anti-aircraft artillery at all, but fighter aircraft, numbering many hundreds of fighters in the Moscow and Leningrad region.

The Luftwaffe did not have many hundreds of fighters for the defense of the Romanian oil fields, and a single fighter group III / JG-52 was sent to Romania, which (together with the planes of the squadron headquarters) had 47 Messerschmitts. True, these were the "Messers" of the latest modification of the Bf-109 F-4. By the beginning of the war, the group was based in the Bucharest region, but after the very first Soviet air strikes on Constanta, the Germans hastily relocated two fighter squadrons to the Mamaia airfield. On the morning of June 24, another wave of Black

Sea Fleet Air Force bombers (14 DB-3 and 18 SB) was met by Messers. Despite fierce enemy attacks, Soviet pilots broke through to Constanta and dropped two hundred bombs, including 12 FAB-500s. The losses were very heavy - 10 aircraft (three DB-3 and seven "SB"), i.e. each

third, did not return to the Crimean airfields. The enemy also suffered losses - one fighter was shot down in the air by the onboard gunners of Soviet bombers and crashed into the sea (in the reports of the crews, 11 downed Messers were announced). Three German and one Romanian fighters were destroyed at the Mamaia airfield - this episode was the first and last successful strike on enemy airfields on the Black Sea theater in June 41st. (147, 156) The next series of raids

on Constanta took place on June 25, with much smaller forces and with even worse consequences: out of 11 bombers of 2 MTAP, five were shot down. The survivors returned to base with hundreds of holes. Considering the tactics chosen by the command of the Fleet Air Force - a series of successive attacks by tiny groups of 2-3 aircraft on an object covered by several dozen enemy fighters, one is only surprised that six bombers still survived.

At dawn on June 26, a DB-3 unit and nine SBs flew out on another raid to Constanta. This time, a couple of "silts" did not reach the target "due to malfunctions in the materiel", and the "SB" squadron lost 4 out of 9 aircraft. (179) . True, on this day, June 26, 1941, units of long-range bomber aviation finally joined the actions of the fleet aviation. However, out of five fully equipped air regiments (there were seven in total) of the 4th DBA Corps, only one 21st DBA took part in the raid on Romanian targets, which, having 50 combat-ready aircraft, completed only 17 sorties. Even this frail force was divided into three groups that attacked Constanta, Ploiesti and the Romanian capital Bucharest. Only five DB-3s flew to Constanta, three of which were shot down by German fighters. Two dozen bombs were dropped on Bucharest from a high altitude (7 km), resulting in only panic among the civilian population and one bomber shot down while retreating from the city. In total, out of 17 DBA aircraft that day, seven were lost (for various reasons). (156)

On the evening of June 26, People's Commissar of the Navy Admiral N.G. Kuznetsov gave the order to suspend the bombing raids of the Air Force of the Black Sea Fleet. Of course, the High Command in Moscow could not agree with such passivity in solving a strategically important task, and already on June 30 an order was received to resume strikes on Romanian targets. This time, the Ploiesti oil fields were chosen as the main target.

The first raid of the Fleet Air Force bombers on Ploiesti took place on the evening of 1 July. Of the six DB-3fs that flew out, only two reached the target, the rest turned back due to the next "malfunctions in the materiel."

Significantly larger forces (23 SB bombers and two DB-3f) attacked the port facilities of Sulina, Tulcha and Constanta (i.e., the fleet air force command continued to solve its "departmental tasks", stubbornly not wanting to be distracted by the bombing of oil fields). The 4th air corps of the DBA sent 14 aircraft to the raid on Ploiesti, of which 4, not reaching the target, returned due to "materiel failures", 5 "did not find" Ploiesti in the darkness of the night and bombed Bucharest. On July 4, in heavy fog,

9 bombers of the 2nd MTAP bombed Constanta again, two more DB-3s were shot down by enemy fighters. After that, the People's Commissar of the Navy issued an order prohibiting the use of bombers during the day. The Fleet Air Force finally switched to safer - and practically ineffective - non-aimed bombing by small groups of aircraft at night.

This is the time to remember that the Black Sea Fleet Air Force had its own fighter aircraft (three air regiments and three separate squadrons), which were armed with more than 300 aircraft, including 19 of the latest MiG-3s. And two hundred kilometers from Constanta were the advanced airfields of the Air Force of the Southern Front, which was armed with about 600 fighter aircraft, including 189 MiGs. It would seem that every bomber in a raid on Constanta or Ploiesti could be covered by a whole squadron of fighters. It would seem that.

There were no unsolvable technical problems. "Migi" and "gulls" had a flight range of more than 600 km. The flight range of the "donkey" was less (440 km), but back in 1939, external fuel tanks were developed, tested and put into serial production, using which the flight range of the "I-16" exceeded 600 km. The tanks were made of special cardboard, which, when hit by a bullet or a fragment, did not give burrs that prevented the self-tightening of the hole in the rubber protector. The last production series of "I-16" without fail were equipped with a pair of hanging tanks.

In solving technical problems, the Soviet aircraft industry went so far that already in August 1941, military technology of the late 20th century was practically implemented: a heavy carrier aircraft, without entering the enemy's active air defense zone, drops a small-sized cruise missile. The four-engine giant TB-3 was used as a carrier, and the I-16 fighter was used as a manned "cruise missile". Two donkeys were mounted on the wings of the TB-3, then, in the immediate vicinity of the target, they undocked from the carrier, attacked the target with a heavy high-explosive bomb in a steep dive, and then independently returned to the base. Work on the "composite bomber" was

successfully started before the war. On August 10 and 13, 1941, three "bundles" (TB-3 + 2 "I-16") struck a strategic bridge across the Danube near Cernavod (Romania), while five direct hits of the FAB-250 in the spans of the bridge were noted - for the military aviation of the early 40s is the "highest

aerobatics" in every sense of the word.

Returning to the events of June-July 41, we are forced to state that not a single attempt was made to provide fighter cover for the bombers - up to the moment when the offensive of the Romanian and German troops did not throw the Red Army back across the Dniester, and the question of using the airfields of Bessarabia took off by itself. The reasons for such disorganization have never been discussed in Soviet historiography (strictly speaking, this question has never been asked). As a hypothesis - the simplest and most plausible - one can suggest that the organizational problem turned out to be insoluble. The Air Force of the Southern Front is one department, and the Air Force of the Fleet is a completely different one. For the Soviet, allegedly "strictly centralized", state machine, the task of organizing joint actions of fighters from one people's commissariat and bombers from another turned out to be insoluble.

If in such a situation the crews of bomber aviation had any chance to complete a combat mission and survive at the same time, then this chance was only in massing forces, in building dense battle formations of large groups of bombers that could meet the attacking Messerschmitts with a wall of machine-gun fire. In the case of raids on Romanian facilities, this task was quite solvable, since the Germans had only three squadrons of fighters there, and these forces had to be distributed between Bucharest, the Ploiesti oil fields and the Black Sea ports (Constanta, Sulina). It would seem that it is not necessary to graduate from the Academy of the General Staff in order to understand this simple arithmetic. Alas, it was at this moment, on July 4, 1941, signed by the Chief of the General Staff Zhukov, that the Directive of the Headquarters of the Civil Code (b / n) was issued with the following content:

The headquarters

ordered: 1. Departure for bombing objects and troops with large groups are strictly prohibited.

2. Henceforth, sorties for bombing on one target at the same time produce no more than a link, in extreme cases, a squadron ...

For hundreds of bomber crews, these few lines were a death sentence. In those days, the high

command saw (and not without reason) in bomber aviation the last reserve remaining at its disposal, with the help of which it could at least stop the non-stop movement of Wehrmacht tank columns to the east. The surviving (and survived after the defeat of the first echelon of the Air Force, mainly parts of the DBA, deployed in the deep rear) bombers were sent in pairs and links to strike at bridges, crossings and motorized columns of German troops. Moreover, if in the latter case the tactic of successive strikes in small groups could still have some meaning (the Germans did not have enough fighters for continuous patrolling over all roads, and, under a happy coincidence, the bombers could avoid meeting with an air enemy), then with raids on obviously known oil fields covered by ground-based air defense and fighters, it is not possible to find a reasonable explanation for such a suicidal tactic. In total, from 3 to 22 July, the bomber aviation of the Black Sea Fleet, during 13 raids, carried out 73 sorties to strike at Ploiesti. Taking into account the initial strength of the Fleet Air Force

(130 bombers, including 55 long-range bombers), such a number of sorties could well have been achieved in one massive raid. With an incomparably more significant result and, most likely, with fewer losses of aircraft and crews. On the other hand, seven dozen aircraft nevertheless dropped several hundred high-explosive and incendiary bombs on the oil fields. It could not pass without consequences. Numerous fires broke out in Ploiesti, production shops and oil storage facilities were destroyed. Particularly severe destruction was noted after the bombing of July 14–15. The Izvestia newspaper reported in those days that ***“as a result of Soviet air raids on Ploiesti, 200,000 tons of various oil products were destroyed during a week. Oil refineries, cracking plants, various equipment of oil sources, railway lines, rolling stock and vehicles adapted for transporting oil were destroyed and damaged.*** This message (with or without quotation marks), this devastating figure (200 thousand tons) has been fluttering from book to book, from author to author for more than half a century. Let's pay tribute to the Izvestia newspaper - even in the conditions of war, it nevertheless was not too lazy to tell the understanding reader the source of this information:

“The correspondent of The New York Times, referring to information from foreign military sources in Ankara, reports that...”

Chapter

25 HOW IT WAS - 2

Kyiv OVO

Ivan Andreevich Krylov has a wonderful fable. About a young impudent raven who decided to hunt.

Of the many lambs, rams and sheep,
I looked out, compared and finally chose
the Sheep, but which one? Prezhirny, pre-
mature, Who was a good b and a wolf in the rise.

That hunt ended badly for the raven - having swooped down on the target, he hit, got tangled in the ram's wool, ***"and ended the feat by getting himself into full."***

According to sound reasoning, the black crows of the Luftwaffe should have ended their offensive in Ukraine with this. The 5th Aviation Corps, which operated jointly with Army Group South over Ukraine, had 8 bomber and 3 (three) fighter groups, the only JG-3 squadron in the corps. In total (taking into account temporarily out-of-service aircraft) they were armed with 247 "horizontal" bombers (163 "Ju-88" and 84 "Not-111") and 109 fighters by the beginning of hostilities. Arithmetically speaking, the Germans could not single out at least a couple of bombers for a simultaneous strike on each of the 150 airfields of the Kyiv OVO. There was not a single Ju 87 dive bomber (this flying symbol of the Blitzkrieg, beloved by all documentary filmmakers), not a single Me-110 fighter-bomber in the sky over the Kiev OVO (Southwestern Front). From this, in particular, it follows that the capabilities of the 5th Luftwaffe Air Corps for aimed bombing at point targets (which are aircraft camouflaged at the edge of the airfield) were close to zero.

German aviation was opposed by the most powerful grouping of the Soviet Air Force - the aviation of the Kyiv OVO (South-Western Front). Here, in the strip from Lvov to Krakow and Katowice, it was planned to deliver the main blow of the Red Army; huge aviation forces were also concentrated here: 20 fighter and 13 bomber regiments as part of the front air force, yes

6 more bomber regiments as part of the 4th DBA air corps deployed in Ukraine (headquarters in Zaporozhye). The 2nd air corps of the DBA (headquarters in Kursk) could also be involved in the operation; these are 6 more air regiments, 250 DB-3 / DB-3f bombers. In

terms of the number of combat-ready crews (not counting the 2nd DBA Corps), the Soviet Air Force had a sixfold superiority in this theater of operations (see Chapter 20). In terms of the number of fighter pilots, the superiority was ninefold. Even in terms of the number of "new types" fighters (185 MiG-3s and 62 Yak-1s, including temporarily out of order), the Kiev OVO Air Force had a two-fold numerical superiority over the enemy - that was a situation unique for the entire Soviet German front. Let us recall once again that these figures were obtained on the basis of a clearly underestimated number of Soviet aviation: many "forming regiments" were not taken into account, all attack air regiments without exception were not taken into account (they were armed with obsolete I-15bis biplanes at the beginning of the war), bomber air regiments were not taken into account, equipped with obsolete four-engine giants TB-3.

Mathematical modeling of combat operations is an extremely difficult job; nevertheless, let us try in the most simplified form to "calculate" the struggle for air superiority in the sky of Ukraine in June 1941 (as it will become clear from what follows, we will no longer have to count July).

Suppose that 100 German fighter pilots fly two sorties every day and only 15 sorties are spent on one downed Soviet fighter (a very high, record figure). Further, suppose that 900 "Stalin's falcons" fight half as intensively (one sortie per day) and four times less effectively - spend 60 sorties per downed enemy fighter (an extremely low figure). For simplicity, we will assume that the fighters are fighting each other, without being distracted by the much more important tactical fight against enemy bombers.

Under these initial conditions (that is, practically "playing giveaway" - for why on earth do Soviet pilots, protecting their native sky, fly half as often as Goering's kites?), we get the following result: by the end of the seventh day, German fighters completely exterminated; the Soviet grouping lost 49 aircraft, i.e., less than 6% of its original strength. Anyone who is not too lazy to work for five minutes with a calculator will see what is the secret of such a swift "defeat of the Luftwaffe": despite the loss of 13 to 3 aircraft per day, a huge group of Soviet fighters almost does not decrease and with constant constancy shoots down 15-14 enemy aircraft per day. In a week, the enemy ends ...

At dawn on June 22, 1941, breaking all the plans and calculations of the top military-political leadership of the USSR, the Germans launched an invasion. In the very first days of the war, small enemy aircraft achieved air superiority. No, it was not at all about a "destructive strike on peacefully sleeping airfields"; nothing like that - the main reason for the low efficiency of the actions of the formally huge Air Force of the Southwestern Front was the indiscipline and inaction of the command. Quite often, they acquired the features of criminal dishonesty and cowardly inaction.

In any description of any operations on any sector of the front of the war of 1941, we necessarily find the standard phrase: "the enemy struck at the junction of the adjacent flanks of the NNth divisions (corps, armies, fronts)". By the way, this is how the events of the first days of the war in Western Ukraine developed: the Germans delivered the main blow at the junction of the 5th and 6th armies of the Southwestern Front. It's time to ask the question: "Why exactly in the joint? Why is this tactic so beneficial to the attacker? After all, on the adjacent flanks of two divisions (corps, armies, fronts) can you run into a counterattack from two sides at once, with a redoubled force? Unfortunately, the Germans knew who they were dealing with. The standard Soviet commander thought first of all about what he would write in the evening operational report "upstairs" and was primarily concerned about the stability of the defense of his sector. In peacetime, this was called a "narrow departmental approach", "localism". The party and the government fought tirelessly against him - they fought until the dissolution of the CPSU and the collapse of the USSR. In a situation of war, this unwillingness to help a neighbor on the front, moreover, the desire in a crisis to shift responsibility to a neighbor, became the cause of a long

series of defeats. On the Southwestern Front in June 1941, when the 5th Army rolled east under the blow of the German tank "wedge", the 12th Army of the front was practically inactive, the 26th fought local battles in its lane, and the commander of the 6th The most powerful 4th mechanized corps was "hiccupped" by the 1st Army and "did not give it up" to participate in a frontal counterattack in the Brody-Dubno area. It all ended in early August 1941 with the encirclement of the remnants of the 6th and 12th armies in the Uman region and the capture of 100 thousand people, including two army commanders. A lot has been written about this today, in particular, by me. (127) The same thing happened in

Compiled in August 1941 at the headquarters of the Air Force of the Southwestern Front, the "Summary of destroyed enemy aircraft", (161), if summarized in a single table, is extremely eloquent: Table 22

	22-30.06	1-6.07	7-12.07	Total
14 IAD (17, 46, 89 IAP), Lutsk 29 15 SAD (23,	10	1		40
28, 164 IAP), Lviv 65 16 SAD (87, 92 IAP),	8	0		73
Ternopil 20 63 SAD (20, 91, 165 IAP), Sambir	2	2		24
0 Air Force of the 12th Army (Stanislav) 0 36	0	41		41
IAD (2, 43, 254, 255 IAP), Kiev 0 TOTAL: 114	0	74		74
	0	17		17
	20	135		269

Note: the areas of pre-war deployment of headquarters are indicated air divisions.

In the first two weeks of the war, some are inactive (the fighter regiments of the left, southern flank of the front), then others. True, these "others" had already been practically defeated by that time: Table 23

22.06 11.07

14th IAD (17th, 46th, 89th IAP) 171 15th SAD 26
(23rd, 28th, 164th IAP) 170/98 20/11 16th SAD (87- th,
92nd IAP) 132/4 38/2

Note: the first digit is for the total number of aircraft, the second is for "new types"; the total number is indicated, including temporarily faulty aircraft.

However, there is a certain difference between events on the ground and in the air. To justify the inactivity of the southern flank of the front at the moment when the enemy was destroying the northern flank, one can come up with many "objective" reasons, causes and justifications. Aviation is the most mobile branch of the military. From Sambir and Stanislav (now Ivano Frankovsk) to the Brody-Dubno region, no more than 150–200 km in a straight line (and it is not necessary to fly along a curve in the air). Accordingly, the fighters of the 63rd SAD and the 64th IAD could cover the mechanized corps, which launched a counterattack in the Brody-Berestechko zone, without even changing their base airfields. However, the reports of the commanders of Soviet tank divisions regularly repeat the same phrase: "Our aviation is inactive ...". And these reports were

not far from the truth.

The Air Force of the Southwestern Front completed 10,000 sorties by July 10. (27) Taking into account the initial number (about 2 thousand combat aircraft and more than 1.5 thousand flight crews), this corresponds to one sortie in 3 days, although in the first, decisive days of the battle, three sorties per day should be expected ... 4th DBA air corps (six air regiments, 345

bombers "DB-3 / DB-3f") was inactive for three days (June 22, 23, 24). Considering that there were 92 crews in the corps, trained for night flights, we can say "it was inactive for three days and three nights." The 4th Corps of the DBA did not obey the command of the front and waited for instructions from Moscow. When the instructions were received, on June 26, five air regiments of the corps carried out 60 sorties to strike at the German tank columns advancing on Rovno-Ostrog. 60 sorties for five regiments is the transformation of a regiment into a squadron. Moreover, a squadron that is not fighting too actively - only one sortie a day. The 22nd DBAD, which was part of the 4th Air Corps (158 serviceable bombers and 133 flight crews), completed only 581 sorties by the end of July, i.e., on average, one crew flew once every nine days. (167, p. 34) This is how the real numerical superiority of Soviet aviation turned into a shaky mirage.

A valuable source of information about events in the sky over Ukraine is the report of the Commander of the Air Force of the Southwestern Front, Lieutenant General F.A. Astakhov, signed on August 21, 1941 (148) General Astakhov took command of the Air Force of the Yu-3 Front only on June 26, after the arrest of Ptukhin. He was not responsible for the failures and losses of the first days of the war (on June 22, Astakhov still commanded the educational institutions of the Red Army Air Force), so his report frankly paints an unsightly picture of events. Without further ado, let's quote some fragments from a multi-page document:

... In the period from 22.6 to 1.7.41, there were a lot of shortcomings in the organization of combat work of the flying units of the Front Air Force, of which the most

serious are: a) The first days of the war (June 22, 23, 24) had repeated sorties, some bomber aviation regiments (226th, 227th and others) were not involved in combat work at all, very few raids on enemy airfields were carried out.

b) There was no interaction between flight units and ground forces and interaction between bombers and fighters, as a result of which ground units did not receive timely support from the Air Force at crucial moments of their combat work, and bombers flying on combat missions without fighter cover suffered heavy losses ...

The report concludes with a summary of the number of sorties and ammunition expended between June 22 and August 10, 1941. **"Aerial bombs dropped - 2842 tons."** Let's not even discuss

about where (on the enemy, in an open field, on the heads of their troops) these bombs were dropped, what was the accuracy and effectiveness of these bombardments. Let's look at a much simpler question: is 2842 tons of bombs a lot or a little? In total, during the indicated period, the Front's aviation carried out 36,780 sorties. The report does not give a "breakdown" of this number between fighters and bombers, but given that the initial number of fighters was twice the number of bomber crews, and fighters fly more often, it can be assumed that at least one fifth of the total number of sorties fell on bombers. In this case, in one sortie, the bomber lifted on average about 390 kg of bomb load. What kind of bombers are these? The most massive "SB" had a normal bomb load of one ton, the maximum - one and a half tons. "DB-3" could lift up to 2.5 tons of bombs. And in a situation where almost all aviation was operating on targets on the battlefield or in the near operational rear of the enemy, i.e. at minimum flight ranges, it was the maximum bomb load that should have been used ... And yet - the results of the collision of the brand new Mercedes "with the old collective farm" UAZ "will be equally noticeable for each of these cars. No matter how badly the "combat work of the flight

units" of the Air Force of the Southwestern Front was organized, the simple and inexorable laws of numerical superiority continued to operate in June 1941. Already on the first day of the war, the 5th Air Corps of the 4th Air Force of the Luftwaffe irretrievably lost 2 fighters and 30 bombers. Another headquarters Me-110 was shot down near Lvov. In total, 33 German aircraft were shot down in the skies over Western Ukraine. The KG-51 bomber squadron alone lost irretrievably 14 Junkers Ju-88s of the latest modification. Noteworthy is the ratio of the losses of German fighters and bombers - one to fifteen. In other words, the JG-3 fighters completely failed their main task. We emphasize once again that we are talking about the irretrievable losses of combat aircraft - taking into account the damaged aircraft, the total losses of the day reach 58 aircraft (and this number does not include losses associated with take-off accidents, collisions in the air, loss of orientation, losses are not included tactical reconnaissance aircraft, sanitary, liaison, etc.).

For the frail forces of the 5th Air Corps of the Luftwaffe, 30 shot down aircraft per day meant the prospect of losing all combat vehicles in less than two weeks. However, this did not happen. It was June 22 ("a surprise attack, peacefully sleeping airfields, unpreparedness for war") that turned out to be the day of the most productive actions of the Air Force of the Southwestern Front! Further

the Luftwaffe's daily casualty rate began to decline sharply and steadily (see Appendix 6). From

June 23 to June 30 inclusive, the 5th Air Corps lost 40 combat aircraft irretrievably (that is, an average of five per day - a sixfold decrease in the level of losses compared with the first day of the war). In July of the 41st, it is quite difficult to separate the planes of the 5th Air Corps, shot down in the Southwestern Front, and the planes of the 4th Air Corps, shot down in the South Front, because in the second half of July the offensive of the ground forces of the Wehrmacht and the Romanian army mixed the original picture of the distribution of forces of the parties. In any case, the cumulative losses of the entire 4th Luftwaffe Air Fleet in July 1941 amounted to less than 4 aircraft per day. As for the losses of formations of the 5th Air Corps (KG-5I, KG-54, KG-55, JG-3), they amounted to only 73 aircraft per month (i.e., 2.4 per day). In other words, the level of average daily losses decreased by a further two times.

It's time to remember about the "first devastating strike on airfields." Perhaps it was precisely as a result of this strike that the number of fighters on the Southwestern Front dropped sharply, and therefore the enemy's losses after June 22 sharply declined? We open once again the report of the commander of the Air Force of the Southwestern Front, we read: **"... on 22.06 the first enemy raids on our airfields of the front line did not inflict significant losses on our flying units, but ... with repeated strikes during 22.6.41 and in the next two days, the enemy inflicted our flying units suffered significant losses, destroying and damaging** (hereinafter, it is highlighted by me. - **M.S.**) **at our airfields on June 22, 23 and 24, 1941, 237 aircraft ... "**

This figure - 237 aircraft - wandered through the pages of the books of our "historians" for many years, but at the same time none of them admitted that these were losses in the first three days, and not at all from one first German raid, and we are not talking about only about "destroyed", but also about "damaged" machines. Damage is different. Many - especially if the plane received them on the ground and not in the air - can be fixed. What does "many" mean? All in the same report by Astakhov it is indicated that in three weeks (from June 22 to July 13) 990 aircraft were restored, which, we note, is 4 times more than the total number of aircraft damaged and destroyed on June 22 at airfields. Be that as it may, even 237 aircraft is only 12% of the total number of combat aircraft of the district air force. If at least half of them have been restored, then irretrievable losses are completely reduced to barely noticeable 5-7%. Can this really be called "complete destruction"? And in any case - a "surprise attack", the notorious "order

Stalin, who forbade opening fire on enemy aircraft, "and other propaganda clichés of the Khrushchev era had nothing to do with these losses. On the 23rd, even more so - on June 24, the reindeer herders of Chukotka already knew about the outbreak of war ...

A glass with 100 ml of liquid can be called "half empty" or "half full". Both will be completely true. Less than 10% of the initial number of aircraft irretrievably lost on airfields is very small. When compared with the later legend about the "first annihilating blow of the Luftwaffe." But General Astakhov (just like the commander of the 20th SAD, General Osipenko, whose order we mentioned in the previous chapter) did not know anything about this "destructive blow", he had no idea about his "inevitability" (and he could hardly think of the possibility of such an absurd story appearing in the future). Therefore, without naming his predecessor as commander of the Air Force of the Kiev Regional Military District, he gives an extremely unflattering assessment of the actions of the command and personnel of the aviation units of the district: "... before the start of the war, the **issues of masking airfields and the aircraft located on them were not resolved; the anti-aircraft airfields were unsatisfactorily organized, which is explained not only by the lack of the necessary camouflage equipment, air defense equipment, but also by the fact that commanders of all levels did not pay due attention to this issue ... the lack of the necessary organization and clarity in the actions of the flying and ground units of the Air Force of the front during repelling enemy air raids on our airfields ... the air surveillance, warning and communications service in the border zone of the Kiev OVO worked unsatisfactorily. On June 22, 1941, the flight units located at the airfields of the front line did not receive messages about flights of the state border by enemy aircraft in a timely manner ...** "

Now let's "tweak the sharpness" and take a look at what **the "lack of necessary organization and clarity in actions"** looked like from a close distance. In many

publications (50, 58, 169) there is a story about a German air raid in the person of a single bomber on the airfield of the 87th IAP (16th SAD, Buchach airfield near Ternopil). The cunning of the enemy led to significant losses:

... From June 21 to June 22, the most experienced pilots of the regiment up to 3 hours practiced night flights.

Did not have time to fall asleep - alarm! Around 4 am, the first air battles began. At 4:50 a.m., a Ju-88 aircraft appeared from the side of the headquarters of the 16th SAD at an altitude of several tens of meters in the rays of the rising sun. Having dropped a series of bombs, the Junkers destroyed seven I-16s ...

In a special message of the 3rd Directorate (military counterintelligence) NPO No. 36137 dated July 1, 1941, this story is described much more realistically: " ... ***The commander of the 87th IAP of the 16th air division, Major S. and his deputy for political On June 22, together with other commanders, they drank in a restaurant in the city of Buchach. After receiving a telegram from the headquarters of the 16th air division about a combat alert (emphasis mine. - M.S.), the command of the regiment, being in a drunken state, was unable to quickly put the regiment in order. On June 22, at 5.50, a German bomber appeared over the airfield, which was mistaken for the aircraft of the division commander. In view of this, he freely began shelling the airfield from a height of 10-15 meters and disabled 9 aircraft ...*** "

Why does the report of the "special officers" appear more reliable? If only because from a height of several tens of meters, the German plane does not drop bombs, but fires from onboard machine guns. In any case, seven (or even nine) "donkeys" damaged at the Buchach airfield were not even part of the equipment of the 87th IAP, but stood at the airfield awaiting transfer to another unit (in the number of aircraft of the Kiev OVO Air Force indicated in this book and the 16th SAD in particular, these aircraft are not included). Even after a super-successful (for the Germans) raid on the airfield, 60 I-16s and 4 MiG-3s remained in the 87th IAP.

The consequences of an enemy strike for the 17th IAP (14th SAD) became much more severe. I must immediately warn you - the story of the defeat of the 17th IAP is more unique than typical. In the first edition of this book, I quite frankly admitted that ***"in many years of work, I could find only one account of one eyewitness about one such event."*** Of course, this is a very frivolous discussion. I knew that such confessions would provoke the fire of legitimate criticism. I couldn't find it - don't complain, but look further. However, a year passed, the second, the third, until, finally, a multi-page opus called "Anti Solonin-1" appeared. (162) Mr. Isaev was indignant for a long time and painfully (***"behind all this lies simple laziness and unwillingness to deal with the real state of things ... the total closeness of the archives is most beneficial for dreamers and "whistleblowers", because it allows you to fantasize with complete impunity, without bothering yourself with an evidence base ...*** "). relish

having cursed, Mr. Isaev began a detailed story about ... yes, all about the same 17th IAP, and again with quoting the memoirs of F.F. Archipenko. This funny incident only strengthened my opinion about the exceptional nature of the events that took place in the first hours of the war at the peacefully sleeping (in this case, almost without quotes) airfield of the 17th Fighter Aviation Regiment.

This regiment was the "old", personnel regiment of the Air Force of the Kyiv District. 57 pilots, 53 aircraft (50 I-153s and 3 I-16s). On the eve of the war, it was stationed at the Velitsk airfield near the city of Kovel, the most important railway junction of Ukrainian Polissya. The level of flight training of the personnel was exceptionally high: **"... Our regiment was 4 squadrons, armed with I-153 seagulls. The regiment was commanded by Major Dervyanov, holder of the Order of the Red Banner, his deputy was Major Semenov, who was awarded the Order of Lenin. Our regiment was so well trained that it took off even at night in formation as part of a squadron** (hereinafter, it is emphasized by me. - M.S.). **I myself later flew at night, but I never saw anything like this in my life when a squadron took off in formation at night as during the day... There were guys who were considered the best pilots in the entire Kiev OBO... Before the war, we flew a lot, doing all kinds of combat training...**

" So writes in his memoirs Hero of the Soviet Union, an outstanding fighter pilot (467 sorties, 30 personally shot down enemy aircraft) F.F. Archipenko. (59) Further - even more interesting. No surprise is visible: **"... The day before the war, an encryption came, allowing to shoot down German reconnaissance aircraft. In addition, 10-12 days before the war, we were ordered to disperse the planes along the border of the airfield. And then they stood flat. We also dug caponiers and crevices for sheltering personnel ... "** And now - the harsh hour of the war has come:

... I had to be an operational duty officer at the airfield from 21 to 22 June 1941.

At that time, one I-153 "Seagull" aircraft with a pilot was allocated for duty, and on that sadly memorable night, Senior Lieutenant Ibragimov, my flight commander, was on duty. On June 22, at 04:25, everything around shuddered from explosions and **a group of German bombers up to 60 aircraft** dealt a crushing blow to the airfield. Before they had time to recover from the first blow, a second raid was made on the airfield. We could not counteract the strikes of the bombers:

the flight crew was in Kovel with their relatives, and there was no anti-aircraft artillery near the airfield.

Gradually, flight and technical personnel began to arrive at the airfield, individual sorties of our pilots began. Until noon, our airfield was subjected to massive bombardment four times. In fact, in this difficult situation, **no**

there was no airfield management. I,

the operational duty officer at the airfield, junior lieutenant Fedor Arkhipenko, clumsily tried to organize rare sorties and evacuate wrecked vehicles. The connection was broken, there were no instructions and orders, only the internal telephone lines laid to the parking lots of the air squadron survived by some miracle.

At about 1 pm, a participant in air battles in Spain, deputy commander of the 14th IAD, Major General of Aviation, Hero of the Soviet Union Ivan Alekseevich Lakeev, flew to the airfield. Arriving at the command post, the general took command into his own hands... There was no one at the command post, **except for the general, me and two soldiers - signalmen ... At about 14:00**, when **the commander of the 17th IAP arrived** there, he let me go from the command post. I hurried to my plane, it tu goal...

Probably, this text can (and should!) be used in classes at military schools: "Name all the points and paragraphs of the Charters and Instructions that were violated in the 17th IAP." We are not at the school, so we will not bore the reader with a long enumeration. And without comment, it is clear that an indescribable mess took place. After the whole series of orders of the last pre-war days, the flight crew of the fighter aviation regiment deployed in the border zone **"was in Kovel with their relatives"**, and the regiment commander appeared at the location of the unit entrusted to him only 10 hours after the start of hostilities (even riding a donkey could drive 20 km from Kovel to the airfield faster) ... The phrase about "relatives in Kovel", who had the entire flight crew of the regiment at their side, is not as simple (and not as reliable!) As it seems. With rare exceptions, the wives (and even more so - children) of the commanders of the Red

Army were not natives of the western "annexed" lands. They arrived there with their military husbands and, at least theoretically, could return to the east, where they left their parents, brothers, sisters. This is theory. Now

Let's turn to practice. On December 22, 1940, the People's Commissar of Defense of the USSR issued Order No. 0362, according to which **"pilots, navigators and aircraft technicians, regardless of their military ranks, who have been in the Red Army for less than 4 years" were transferred to the barracks position.** Pilots, navigators and aircraft technicians, transferred to the barracks, had to spend the night at the location of the military unit. Others are called "AWOL" in peacetime, and desertion in wartime. Paragraph 7 of order No. 0362 read: **"Families of the flight and technical personnel transferred to the barracks should be removed from the territory of military camps by February 1, 1941. Send the evicted families to their homeland or resettle them to honest city and town housing funds outside the location of the air unit ... "** (163, p. 202) It is noteworthy that in the preamble of the order it was said: **" ... is just one step. Our aviation, which will be the first to**

take up battle with the enemy, must therefore be in a state of constant mobilization readiness ... Nowhere in the world does such an order all sorts
exist for pilots to live in apartments with their families and for aviation units to be semi-civilian villages. To tolerate such a situation further means to jeopardize the combat education of our pilots, the cause of strengthening our aviation, the defense of our country ... " Golden words. But if already in December 1940 the situation was assessed as "fraught with all sorts of surprises" and therefore, even in distant Siberia or Kazakhstan, pilots were transferred from family shelter to barracks, then what prevented similar measures from being taken in the fighter regiment of the first echelon of the Kiev OVO Air Force? At least after it was

in this district (and not far from Kovel) that a German corporal swam across the border river Bug, in a hurry to warn the "homeland of the proletarians of the whole world" that in the Wehrmacht units the order to go on the offensive was read to the personnel on the morning of June 22 ? Yes, in the hours remaining after that it was impossible to carry out (i.e., start and finish) a general mobilization, it was impossible to re-equip the regiment from "gulls" to "migi" - but what prevented the flight crew from being assembled at the airfield?

On the second day of the war, no one spent the night in Kovel with relatives. Which, however, did not prevent the Germans from finishing off the remnants of the regiment without much effort: **"In the early morning of June 23, we were at the airfield. There were 25-30 serviceable aircraft** (far from every Luftwaffe air group had such a number of serviceable aircraft on the morning of June 23. - *M.S.*) **... In general, the second day of the war passed calmly for the regiment, the Germans did not touch the airfield**

(hereinafter it is emphasized by me. - *M.S.*), ***only scouts flew over it. But on the morning of the third day, a dozen Me-109 fighters flew in. They stood in two circles: six planes with the right bank and six planes with the left bank and stormed, as at a training ground. The shelling was accurate, confident, as if on targets. As a result, 10 serviceable I-153s and one MiG-1 remained at the airfield, all the other machines, about 150 in number, were damaged ...*** ".

Let's summarize the first results of what we have read. Firstly, even in an atmosphere of complete, criminal sloppiness, after several hours of continuous bombing of a deserted airfield, 25–30 combat-ready aircraft remained in the 17th IAP (strange arithmetic with "150 damaged aircraft" is explained by the fact that, as Archipenko writes, at the airfield ***"About 70 I-15 aircraft of an outdated design were idle, to be transferred to aviation schools"***). Many of those ***"damaged by fragments"*** could be restored and were actually restored. Specifically, in the report of the commander of the Air Force Yu-3 f. it is indicated that, in general, 70 I-153 aircraft were restored in the 14th SAD (out of 78 available at the start of hostilities!). Secondly, the regiment suffered the main losses not in the first hours, but on the third day of the war. The reasons why the command and

personnel of the regiment (which was armed with about three dozen serviceable fighters) without the slightest resistance allowed the squadron of "Messers" to shoot combat aircraft, "like at a training ground", F.F. Archipenko does not name. It's a pity. There are other questions as well. It is not clear why the on-duty flight (that is, four fighters) provided for by the regulations turned into a single aircraft at the border airfield. The number of enemy bombers allegedly taking part in the first raid also raises serious doubts. Not a single bomber group of the 5th Luftwaffe Air Corps had even half of the declared number (***"a group of German bombers up to 60 aircraft"***) of serviceable aircraft. In fact, on June 22, strikes were delivered by forces of one or two links, at most - one squadron (staffel). It is interesting to note that, according to Captain F.S. Demin (commander of the 374th separate anti-aircraft artillery battalion deployed in the Kovel area), the airfield was indeed bombed at 4 am on June 22. Only not 60, but 7 German

aircraft.

Now from the line of memories we pass to the harsh prose of documents.

According to the "Summary of Destroyed Enemy Aircraft", the half-defeated regiment, moreover, armed with obsolete slow-moving I-153 biplanes, inflicted quite tangible blows on the enemy.

losses: on the first day of the war, the pilots of the 17th IAP shot down 4 enemy aircraft, then another 5 in the period from June 23 to June 30. The total is nine. Few? How to say - if each of the 20 fighter regiments of the Air Force of the Southwestern Front in June 41st shot down 9 German aircraft, then less than half of the 5th Luftwaffe air corps would remain ... Of course, the declared figures are many times more than the real ones, but even with Given this clarification, it is not necessary to speak of a complete inactivity of the regiment.

Further, the losses of the aircraft of the 17th IAP reflected in the documents coincide with amazing accuracy with the memoirs of Archipenko. In the above article, A. Isaev, with reference to reports on the combat and strength of units of the 14th IAD (TsAMO RF, f.229, op. 181, d.33, l.25) - indicates that by the end of the day June, the number of combat-ready aircraft in the 17th IAP decreased by 18 units, i.e. from 47 to 29. We emphasize once again that we are not talking about irretrievable losses at all, but about reducing the number of combat-ready aircraft - which is not at all the same in aviation the same (an aircraft that has burned out any of the many signal lights on the dashboard is considered faulty). Comparable losses were suffered by the 46th IAP from the 14th SAD, where the number of combat-ready aircraft was reduced by 16 units (out of 46). But this regiment, based at the Granovka airfield near Dubno, fought active air battles, and, judging by German documents, many German bombers shot down on June 22 crashed to the ground in this area. The third (and best-equipped) fighter regiment of the division, the 89th IAP, lost 7 aircraft out of 66 in a day. The losses are serious, but they can hardly be described with the word "rout".

Nevertheless, by July 3, only memories remained of the 14th Air Division. Two regiments (17th IAP and 46th IAP) were actually disbanded - the pilots "departed to receive new materiel"; the surviving aircraft and people of the division were consolidated into two regiments (the 89th IAP and the emerging 253rd IAP), the total number of aircraft was reduced to 44, of which only 16 were combat-ready (7 "donkeys" and 9 "gulls"). (162) Recall that by the beginning of hostilities, the division was armed with about 170 aircraft (not counting the large number of obsolete I-15bis and 9 newest MiGs, whose participation in hostilities did not leave any traces). Where did this great number of combat aircraft go? What was the specific reason for the loss? An extremely controversial answer to this question is presented in the following Table 24. Table 24

	22– 24.06	25– 27.06	Amount	22.06 — 3.07
Shot down in the air, did not return from combat	12	7	19	28

tasks

Destroyed at airfields by the enemy	53	Abandoned	29	82	75
at airfields, destroyed during withdrawal	47		9	56	12
Destroyed					
in catastrophes and accidents	TOTAL:	- 10		10	12
		112	55	167	127

Note: in the line "shot down in the air" are taken into account shot down in the air battles and shot down by anti-aircraft guns.

The "Amount" column shows the arithmetic sum of losses from June 22 to June 27 inclusive (the sum of the numbers in the first two columns). By sound logic, the numbers in the fourth column (cumulative losses from June 22 to July 3) should be greater than the losses from June 22 to 27. At least not less: they couldn't "resurrect" the planes left at the airfields deep behind enemy lines (by July 3, the Southwestern Front rolled back 200–250 km east of the border, and at the airfields the 14th SAD had already On June 26, German fighters were based!). This obvious rule is observed only in the lines reflecting "normal" losses: losses from enemy impact, missing ("did not return from a combat mission") and aircraft destroyed in accidents. In the case of "airfield losses", complete confusion reigns: 56 aircraft left (abandoned) at airfields in the period from June 22 to 27, by July 3 "turn into" 12. The number of aircraft destroyed on the ground is also decreasing. the enemy, however, not so sharply (from 82 to 75). Even if we take the smaller numbers (i.e., the last column of the table) as the true truth, then in this case a very unsightly fact is revealed: losses on the ground account for 69% of the total number of irretrievable losses. Comparing the total number of aircraft irretrievably lost at airfields (87 units) with the above losses on the first day of the war (13 aircraft, not only on the ground, but also in the air), we finally come to some final conclusion. A very strange conclusion: the planes of the 14th Air Division

were mostly lost on the ground, but the events of June 22 ("the first annihilating strike on peacefully sleeping airfields") have almost nothing to do with this. And this, mind you, in the same division, where on the morning of June 22, the criminal negligence of the command and the inaction of the personnel went beyond all limits.

Concluding the review of the strange events that led to the defeat of the 14th SAD, we will present two more fragments of the memoirs of the participants in the war. In the memoirs of General Krasovsky (with the outbreak of war, he became commander

Air Force of the North Caucasian Military District), we find a description of the meeting with the commander of the 14th SAD:

... In July, the 14th Air Division arrived from Western Ukraine ... There was a knock on the door of my office, and a pilot appeared before me without military distinctions, in a white silk balaclava, wearing glasses. He kept himself loose. - What kind of army is this? I asked.

- Comrade General, commander of the 14th Fighter Division, Colonel Zykanov. - Try to put on the proper uniform. Zykanov left.

I asked the head of the political department: - Do you have all the pilots in this form? - No, what are you! We have very good people. ... The next day, Colonel Zykanov again arrived at the district air force headquarters. Somewhere he got a cap, a tunic not for his height, a belt. - Now it is clear that you are the commander of the Red Army. And we said

hello. - May I call Moscow? Zykanov asked. - Call. In the course of the conversation, I realized that he was reporting to the member of the Military

Council of the Air Force P.S. Stepanov about the plight of his division. After a minute or two, Zykanov handed me the phone.

"Krasovsky," I heard, "send Zykanov to Moscow tomorrow. Looks like we'll have to bring him in.

responsibility...

Fighter pilot, participant in the war in the skies of China, D.P. Panov met the war in the 43rd IAP of the 36th Air Division, which covered Kyiv. It's far from Kiev to Kovel, however, in Panov's memoirs, the deputy commander of the 14th SAD, Major General Lakeev, suddenly appears (although Panov mistakenly calls him the division commander - the mistake is quite understandable, given that in the 14th SAD the deputy commander was a general, and the commander - Colonel): **"... I remember a hot day in July 1941. I am sitting in the cockpit of the I-153 Seagull at the airfield south of Brovary, where the poultry plant is now, before departure ... Major General without a position, Spanish Hero of the Soviet Union Lakeev, the Germans came up to the board of my plane, whose division, where he was commander, burned on the ground on the very first day of the war** (a big and, alas, traditional exaggeration. - M.S.), **and now he was hanging around our airfield idle. Fly Lakeyev cowardly and**

was engaged in what inspired the flight crew. He decided to inspire me too: "Come on, come on, commissar, give them pepper." I really wanted to send the hero praised in the press, poems and songs away, but the high commissar position did not allow me. Lakeev sent away and showed him a combination of a fist pressed to the elbow with the other hand, one of the pilots of the neighboring 2nd regiment ... "

Why are these hard-hitting stories about the "insignia of military distinction" of the command of the 14th SAD? Not at all to disturb the memory of long-dead people, but solely to explain why all the figures and all the reports signed by them should not be taken as "ultimate truth" ... The very first "candidate" for destruction by the first sudden strike the Luftwaffe

could be considered the 15th SAD. This division - three fighter and one "assault" (actually armed with obsolete I-15bis fighters) regiment - was deployed at the very tip of the so-called "Lviv ledge". Two regiments of this division (23rd and 28th) were re-equipped with MiG-3s, which, according to the strange logic of Soviet historians, due to the fact that these aircraft were not mastered by the flight crew, also increased its chances of becoming an object of fleeting extermination.

In fact, both of these regiments were alerted even before the first shots were fired at the border and met the enemy already in the air. The fighters of the division were very active: the pilots of the 23rd IAP (66 pilots) completed 124 sorties on the first day of the war, the 28th IAP (52 pilots) - 114 sorties. (94) Based on the Enemy Aircraft Destroyed Report, on the first day of the war, the division destroyed 15 enemy aircraft and another 50 (including 7 identified as "reconnaissance aircraft") between 23 and 30 June. With all the reservations about the inevitable overestimation of the number of enemy aircraft shot down, it should be noted that in June the 41st, the 15th SAD became the most productive fighter unit in the Air Force of the Southwestern Front. The

consequences of seven German air raids on the airfield of the 23rd IAP in Adamy were expressed in the fact that 13 aircraft were put out of action. (94) Probably, many of them received only minimal damage, since, again, judging by the report of the front air force commander, 34 MiG-3s and 8 I-16s were restored in the 15th SAD in two weeks. (148) In total, from 22 to 24 June inclusive, the division lost 70 aircraft on the ground. The figure is large - however, almost all of it consists of the losses of materiel of the 66th assault aviation regiment (58 I-15bis biplanes and 5 newest Il-2s) - in all the above numbers of the size of the Front Air Force, this regiment and these

aircraft were never taken into account. During the same period, 17 fighters of the division were shot down in the air, another 25 "did not return from a combat mission." We do not know the real (confirmed by the enemy) number of aircraft shot down by the pilots of the 15th SAD, but it can be assumed that our own losses in the air were twice the number of enemy aircraft shot down. Yes, strictly speaking, a fighter formation is required to shoot down more than lose, but for the first days of the war, even such a level of performance could be considered quite acceptable. And only from the end of June - the beginning of July, something was wrong with the 15th SAD: in the first week of July, it claims only 8 victories, and then completely disappears from the reports of the front air force command. (161)

Now we will try to estimate the size and structure of the losses of the South Air Force Western Front as a whole.

The report of General Astakhov, Commander of the Air Force of the Front, dated August 21, 1941 (148), which we repeatedly mentioned, was published in SBD No. 36 in abbreviated form (the compilers of the collection did not hide this, noting the breaks in the text with ellipses). A. Isaev cites (with reference to the same archival file - TsAMO RF, f.229, op.181, d.25) a summary of aircraft losses in the period from 22 to 30 June inclusive. In addition, he, with reference to the Journal of Combat Operations of the Air Force of the Southwestern Front (TsAMO RF, f.229, op. from 25 to 27 June. For ease of use, we will summarize all the numbers in a single Table 25. Table 25

	22 - 25	26 - 27	28 - 29	30.06
Shot down in the air, did not return from 147 combat missions	89	157		393
Destroyed on airfields 234 by the enemy	34	36		304
Abandoned at airfields, 31 destroyed during withdrawal		62		108
Destroyed in catastrophes and accidents TOTAL:	36 448	35,173,290		106 911

Note: - the figures in the column "June 28–30" were obtained by calculation by subtracting the sum of the figures in the first and second columns from the total figures in the last column "June 22–30";

- the original document does not indicate the number of aircraft left at the airfields and broken in accidents during the period of June 25-27; the figures given in the table (15 and 35) were obtained by calculation from the conditional assumption of a uniform distribution of the number of accidents in each of the "three-day

periods". The information presented in Table 25 is extremely informative. First of all, it unconditionally refutes the myth about the destruction of Soviet aviation on the first day (in a milder version - "in the first days") of the war. Even after the loss of 911 aircraft (and taking into account the real losses of the enemy), the Air Force of the Southwestern Front outnumbered the 5th Air Corps of the Luftwaffe by 2.5 times. Taking into account the aircraft of the 4th DBA Corps, this superiority becomes

even greater. Losses accounted for as losses on the ground (304 + 108) amounted to 412 aircraft, i.e., about 21% of the original number. This is a huge percentage - if we compare it with the "normal", confirmed by the statistics of many years of the war, the share of combat losses of aircraft from enemy air strikes on airfields. And this is very little - in comparison with the legend about the "first annihilating blow." We emphasize once again that 21% of the initial number of aircraft was lost not at dawn on June 22 and not on the first day of the war, but over the course of nine days! True, it should be noted that D. Khazanov, referring to the same archival file (TsAMO RF, f.229, op.181, d.25), claims that **"304 aircraft became victims of air raids, and at least 276 aircraft were abandoned or blown up at border airfields.** (167, p. 44) In this case, as we see, the number of "ground losses" increases to 580 units - however, Mr. Khazanov's incorrect handling of archival references is not a secret ...

From the obvious conclusions, we now turn to difficult questions. First of all, the difference in the assessment of the consequences of a strike on airfields in the first three days of the war is striking. The report of the Commander of the Air Force of the front (see above) speaks of 237 aircraft destroyed and damaged on June 22, 23 and 24. Data are given on the number of restored cars, which is many times greater than the number of damaged ones in the first days. On the other hand, almost the same number of aircraft (234 units) is classified as an irretrievable loss in the Front Air Force railway department. This contradiction can have two explanations, namely: the aircraft damaged at the border airfields (first of all, this applies to the 14th SAD and the 15th SAD) went into the category of irretrievable losses due to the retreat of the ground forces of the Red Army and the panic abandonment of the airfields; or one of the senior air force commanders of the Southwestern Front made a big "

reporting.

The last number in the first row of Table 25 also deserves close attention, in which all three components of aircraft losses in the air were combined into an indistinguishable sum. In the original document (the report of the Commander of the Air Force of the Front), three numbers are

indicated: - 180 shot down in air battles; - 70 shot down by anti-aircraft guns; - 143 did not return

from a combat mission. What is behind this phrase: "did not return from a combat mission"? Where is the plane? Where is the crew? If we assume the simplest, namely: the plane was shot down by enemy fighters or anti-aircraft guns, but there were no witnesses to this event (or they could not pass a report to the appropriate headquarters), then it is possible, as a first approximation, to "distribute" these 143 missing aircraft to those shot down by fighters and shot down by anti-aircraft guns in the proportion of 18 to 7 (that is, the same as the known losses). As a result of these undisputed, but acceptable for an approximate assessment of arithmetic operations, we come to the following loss figures:

- 283 shot down in air battles; -
PO shot down by anti-

aircraft guns. Strictly speaking, such proportions are not typical for that war - the losses from anti-aircraft fire are most likely overstated, the losses of air battles are underestimated. In general, for the entire period of the war, losses from anti-aircraft artillery fire amounted to 21-25% of the total number of combat losses; in the first nine days of the war, when Soviet aircraft were operating over their own territory and only in very rare cases flew over the front line (which is confirmed by many documents), the proportion of losses from anti-aircraft fire should have been even less - in our conditional "calculation" it amounted to 28 %. But even this, most likely underestimated, number of losses in air battles (283 aircraft) is of great surprise. Why? Because it is almost equal to the declared number of victories of German fighters from JG-3. And it can't be, because it can't be never.

JG-3 fighters claimed 258 Soviet aircraft shot down (182 between 22 and 27 June and 76 in the last three days of June). (162) From this number of declared victories, it is necessary, for starters, to subtract the bombers of the 4th DBA Corps - at least on June 26, German fighters reported 26 DB-3fs shot down. (167, p. 35) Then, the number of declared victories should be divided by the most modest overestimation factor, i.e., reduced by 2-3 times ... 100-120 enemy aircraft shot down in 9 days by the forces of three fighter groups of the JG-3 squadron, this is a great record. To believe that the German pilots reported on

A LESSER number of aircraft than was shot down in reality is absolutely impossible. It is interesting to note that Mr. Isaev himself could not fail to notice the absurdity of these figures, but hastened to give them such an amusing explanation: "I will ***also note a curious effect: the side that wins the air war most often hardly overestimates its successes.***"(162) Alas, nothing like this has been noted in the history of World War II (see Appendix 7). In the victorious 44th year, the "overestimation factor" in the reports of the Soviet Air Force rose to an outstanding mark of 6 to 1.

It remains to be assumed that the actual number of Southwestern Front Air Force aircraft shot down in air battles was significantly less than what is indicated in the command reports, and the term "did not return from the mission" is a kind of euphemism (a word that replaces another, less euphonious word), the real content of which needs serious clarification. Most likely, such an assumption will seem strange and unreasonable to the reader. We will return to this issue and to this term ("did not return from a combat mission") in the future - and more than once - but for now, having completed a brief overview of the events in the sky over Ukraine, let's move on to the other, northern flank of the war front.

PRIBALTIAN OVO

In the offensive zone of the German Army Group North, from the Neman to the shores of the Gulf of Finland, the 1st Air Corps of the 1st Air Force of the Luftwaffe operated. It included a fairly powerful group of bomber aircraft (8 groups, not counting the "coastal" group KGr-806, operationally subordinate to the fleet command), which was armed with 240 Junkers Ju-88, of which about 192 vehicles were in combat readiness. The fighter force consisted of three JG-54 squadron groups and two (4th and 5th) squadrons from II / JG-53, which were armed with a total of 164 aircraft (131 in combat readiness). All "Messers" in the 1st Air Corps were the latest modification of the Bf-109F. Theoretically, three groups of Soviet aviation could become an adversary of the 1st Air Corps: the

Air Force of the Baltic Special Military District (North-Western Front), the Air Force of the Leningrad Military District (Northern Front) and the Air Force of the Baltic Fleet. Strictly speaking, this is how it all happened practically - just not right away. As noted in the previous chapter, until the very end of June, the Air Force of the Northern Front and the Air Force of the Baltic Fleet were fighting (or, to be more precise and honest, they showed some activity) on the "Finnish front". As a result, in the first week of the war

German aviation was opposed only by the Air Force of the North-Western Front. However, one "only" Air Force S-3 f. (8 fighter and 8 bomber regiments as part of five air divisions) surpassed the 1st Luftwaffe Air Corps in the number of bomber crews - 1.7 times, in the number of fighter pilots - 2.7 times. The Air Force of the Baltic OBO received 139 new MiG-1 / MiG-3 fighters, which is slightly less than the total number of enemy fighters. It is also worth noting that the fighter regiments of the Baltic District (10th IAP, 15th IAP, 31st IAP) were among the first to receive MiGs, in the winter of 1940-1941.

The first report of the headquarters of the North-Western Front was sent to the People's Commissar of Defense of the USSR at 0610 hours. Already in it, the first failure is detected, caused by Stalin's too intricate military-political "games":

at 0400 on 22 June 1941 the Germans started fighting. The enemy air force bombarded the airfields of Vindava, Panevezys, Siauliai, Kovno... Our air force is in the air. Until I received your order not to fly over the border, I received through General Safronov your order not to fly over the border without permission. He took measures to bomb the enemy without overflying the border ...

(9, p. 36)

How does it feel to "bomb the enemy without crossing the border"? Where is it still could be found at 5-6 o'clock in the morning on June 22?

Nevertheless, in an atmosphere of general confusion and confusion, some parts of the Air Force of the front began to act according to pre-war plans, and these plans, as you know, involved bombing airfields, railway junctions, bridges and crossings in the adjacent territory. In particular, **"on June 22, 1941, at 4:50 am, 25 SB aircraft from the 9th BAP of the VVS S-Z f. flew to the bombing of the German airfield near Tilsit ... "** (VIZh, 8\1988) As befits a conscientious historian, A.G. Fedorov gives after this information a link to the archival fund (TsAMO f.861, op.525025, d.2). Of particular value to this evidence is the fact that it was published not only by a professional historian, the author of one of the best "pre-perestroika" books on the history of the Soviet Air Force (41), but also by a military pilot who, from November 1941, commanded this same 9th BAP.

Other commanders preferred to simply wait until the authorities sort it out among themselves. Still others (including the command of the Baltic OBO) rushed to "grab the hands" of their subordinates, who began to fulfill the instructions of the "red packets". The story of Lieutenant General V.P. Bulanov, who met the war as the navigator of the Ar-2 bomber in the 46th BAP (Siauliai airfield, 45 crews, 61 SB and Ar-2 aircraft), allows us to imagine how it all looked in real life: "...June **21 the regiment was relocated to a field airfield** (hereinafter, it is highlighted by me. - *M.S.*). **Why - there was no explanation. They ordered the planes to be camouflaged. At 4:30 we were alerted. — How, what? Do not say anything. At about 5 o'clock they give the first task: to bomb the Germans who are forcing the Neman River in the Tilsit region. The first squadron takes off, the second takes off - nine aircraft each. We take off with the third squadron. The first nine bombed, the second bombed ... We were already approaching the Neman, and suddenly the team - to return ... We return with a full bomb load. We sit down** (it is strictly forbidden to land with bombs, in such a case even the simplest bomb releaser has an idle mode, without an explosion, dropping bombs. - *M.S.*) **We put the planes, went to have breakfast - and then suddenly a German reconnaissance aircraft flies by, and bombers appear behind it "Heinkel-111". Also nine. The Germans began to bomb the aircraft parking areas, and as soon as they bombed, they passed at low level and began to fire machine guns along the edge of the forest. They made a call once, combed, the second ... The Germans bombed the target, dropped some of the bombs into the forest and left without loss. Finally, everything calmed down. We started to get ready for the airfield... As soon as we started to approach, our bombs in the planes began to explode... We are tearing back! Losses in the equipment remaining at the airfield turned out to be significant.**

There was also one dead ... " (128) Special report of the 3rd Directorate (military counterintelligence) NPO No. 2 / 35552 of June 28, 1941 gives an even more unsig

... The main losses [of the 7th air division] relate to the 46th SBAP and are explained by the disorganization and confusion on the part of the regiment commander, Major Senko, and the chief of staff, Lieutenant Colonel Kanunov, who caused the entire personnel to panic during the first enemy raid.

On June 22, the 46th SBAP lost 20 aircraft, of which 10 were destroyed during an enemy raid on the Siauliai airfield, and the rest were shot down during combat missions to bombard enemy troops in the Tilsit area and st. Killen.

Three nine aircraft of the 46th SBAP were released to perform combat missions without escort of their fighters. Observation posts were not organized, the headquarters of the regiment had no connection with them and did not know about their existence ...

(151)

Unfortunately, the 46th BAP was no exception. According to the memorandum of the head of the 3rd department of the North-Western Front, divisional commissar Babich No. 03 dated June 28, the commander of the 54th BAP (Vilnius airfield, 54 crew, 75 aircraft, including 7 of the latest Pe-2s) "on the first day of the **war gave the order to raise the 3rd squadron and wait for further orders in the air. The squadron, armed with Ar-2 aircraft and four SB aircraft, waited for an order in the air for 1.5 hours, as a result of which it could not complete the combat mission, since it could only be in flight for 3–4 hours. The Ar-2 planes were forced to land on their airfield with bombs, and the SB flight, which flew out on a combat mission, completely died after 1.5 hours in the air ...**". (151)

Meanwhile, in distant Moscow, they finally adopted a much more intelligible Directive No. 2. It, in particular, said: " ... **With powerful strikes by bomber and attack aircraft, destroy aircraft at enemy airfields and bomb groupings of its ground forces. Air strikes should be carried out to the depth of German territory up to 100-150 km. Bomb Königsberg and Memel...**" This directive was signed at 07:15. Plus time for encryption,

transmission, decryption. In general, the first 4–5 hours of the war were wasted. There is no reason to attach "fateful" significance to this incident, but additional nervousness was introduced into the already tense atmosphere of the first hours of the war. After Directive No. finally reached the attention of the PribOVO command, the activity of Soviet aviation increased markedly.

... The telephone operator connected us with

Vindava: - Mogilevsky? How are you? Fine? Take the package that is in your safe, open it and act as it is written there **(hereinafter, it is highlighted by me. - M.S.)**. The regiment commander **(40th BAP, 54 SB aircraft, 48 crews. - M.S.)** confirmed that he understood the order and began to fulfill it ... At ten two minutes on June 22, 1941, our red-star bombers headed for west.... ... Pleased with Major Mogilevsky.

“ **The raid on Königsberg, Touragen and Memel** ended successfully,” he said by phone. There was powerful anti-aircraft fire, but the bombs were dropped exactly on the targets. We have no losses.

(54)

The book of memoirs of the commissar of the 6th Air Division of the Air Force of the North-Western Front A.G. Rytov, from which we have quoted this remarkable testimony, was published by the Military Publishing House in 1968. The young officer Volodya Rezun then did not even guess that he was to become Viktor Suvorov, the author of the "Icebreaker" ... Bombing attacks on the adjacent territory continued all

day. The operational report of the front headquarters No. 03, signed at 22.00 on June 23, reports that **"The Air Force fought enemy aircraft during the day, operated at the airfields of Insterburg, Königsberg, Priekule, Memel, Tilsit ..."**. In a report on the military operations of the Air Force of the North-Western Front, compiled in July 1942 (i.e., a year after the start of the war, when it was no longer necessary to explain the reasons for the defeat), it is noted that "On the first and second days, the Air Force **attacked airfields and enemy troops in the areas of Memel, Tilsit, Gumbinien. The Air Force of the North-Western Front operated bomber aircraft in groups of 6-18 aircraft under the cover of I-153 and I-16 at the indicated objects.** (9, 185)

Of course, the exchange of blows was mutual. In intelligence report No. 03 of the headquarters of the S-Z.f. from 12.00 two episodes were named: **"at 4.55 5 aircraft bombarded the airfield in Panevezys"** (this is the base airfield of the same 9th BAP, from which 25 "SB" flew out at 4.50 to bomb the German airfield near Tilsit) and **" at 9 hours 25 minutes they bombarded airfield in Šiauliai"** (this is most likely the above-mentioned episode with the bombing of the airfield of the 46th BAP, where the regiment's indiscipline led **"during the first enemy raid, all personnel into a panic state"**). In addition, the report refers to the bombing by large forces (**"up to an aviation regiment"**) of the cities of Kaunas, Siauliai, by small groups (from 5 to 12 aircraft) - Alytus, Kalvaria, Vindava, Yurburg.

It is highly noteworthy that intelligence report No. 03 ends with these words: **"The enemy has not yet brought into action significant air forces, limited to the action of individual groups and single aircraft."** (9, p. 40) No misprint. This is exactly the summary of June 22, 1941 **"A crushing blow ... an armada of fascist aircraft ... endless rows of crows with spider swastikas ..."**

What losses did the Air Force units of the Baltic OVO (North-Western Front) suffer on the first day of the war? Unfortunately, the author does not have an exact and exhaustive answer to this question (however, who has one?). Operational summary of the S-3 headquarters f. dated 22.00 on June 22 summed up the results of that very long day as follows: **"... Enemy aircraft bombed communication centers, settlements, warehouses, airfields during the day** (airfields, as we see, are indicated only as one of many targets. **- M.S.) and caused serious damage to Siauliai and Kaunas. Our Air Force, performing tasks, fought against enemy aircraft and bombed the accumulation of tanks and tank columns in the Tilsit region and in the Alytus direction. Losses: 56 aircraft destroyed, 32 damaged at airfields"** (9, p. 44) Once again, we note that "damaged" is not the same

as "destroyed". Now let's look at these numbers from the other side of the front. German fighters from II/JG-53 reported 17 Soviet aircraft shot down. The number of claimed victories for JG-54 is unknown to the author. In the first (not very accurate) approximation, it can be assumed that it was 3 times larger, i.e., about 50. There is little accuracy in such an estimate - but in the reports of fighters about the planes they shot down, the "accuracy" is even less. Based on the usual 2-3-fold overestimation, it can be assumed that on June 22, German fighters shot down no more than 25-35 Soviet aircraft in the air. Even taking into account possible losses from anti-aircraft guns and from the fire of aerial gunners of German bombers, the report of the headquarters of the North-Western Front, at least, did not underestimate (and possibly exaggerate) the losses of the front's aviation in the air. In comparison with the initial number of aircraft (about 1100 units), the loss of the Air Force S-3 f. amounted to less than 10%, and this number of losses included vehicles temporarily damaged at airfields.

The very low intensity of air battles on June 22 is also evidenced by the number of downed German aircraft. The above-mentioned summary of the S-3 headquarters f. claims that **"19 enemy aircraft were shot down by aviation, and 8 aircraft were shot down by anti-aircraft artillery. These figures are being verified."** Very modest results for 8 fighter regiments. Especially if you compare this report with the real losses of the Luftwaffe on June 22, 1941 (2 bombers and 1 fighter were irretrievably lost, another 6 vehicles were damaged).

Now let's move on from the general figures to the important details of the events. Here is how the commissar of the 6th Air Division Rytov describes the first day of the war in his memoirs: **"... A few minutes later, I was convinced that the Nazis had done a lot of craters on the working area of the airfield, but the damage from the raid was insignificant. Aircraft here began in advance, from 2**

June, disperse far beyond the runway, and now only three cars from the F.A. regiment were on fire. Agaltsov, who had just flown to Mitava from some Estonian airfield... The commander of the 31st bomber regiment, Fyodor Ivanovich Dobysh, reported that his unit took to the air twice to avoid being hit.... Even from the war in China, I remembered Dobysh as an executive commander ... " (54)

Paying tribute to Comrade Dobysh's diligence and his many years of combat experience, we note that he only conscientiously carried out numerous orders to transfer the district aviation to combat readiness, which (as noted in previous chapters) were given a few days before the first enemy raids.

On June 27, Rytov again visited the 31st BAP. ***"Soon I again went to the Mitava airfield, to Dobysh. He still held his regiment in his fist. Every day he organized sorties on combat missions. Despite enemy bombardments, he managed to save the aircraft almost completely. The experience he gained in China and in the battles with the Finns had an effect ... "*** And here is the picture that Rytov discovers at noon on June 22 in the 21st IAP:

... I returned to the Riga airfield. Met me at KP commander of the 21st Fighter Regiment, Major Miroshnichenko.

— How is the situation? I ask. - There was a bombing. True, not strong. The planes were dispersed, the pilots were in the cockpits. They are waiting for commands.

Noticing me, the battalion commissar Yurov approached:

"People are in a fighting mood... ..

Somewhat later, Yurov sent a political report. It was written in pencil, on a crumpled piece of paper torn from the edges. The message breathed fiery passion. I did not catch even a hint of confusion in it. Yurov briefly reported: nine (??? - M.S.) enemy planes were shot down ...

The next day, June 23, the Germans tried to carry out a massive attack on the Riga airport.

... Air observation posts reported that a large group of fascist bombers was heading for Riga. The fighters of the 21st Aviation Regiment rose to meet them ... In the very first minutes of the battle, our pilots shot down three Junkers on the way to the city. A small group of bombers still managed to break through to the airfield, but they did not cause significant damage.

inflicted. The bridge across the Western Dvina also remained intact. On June 24, the Germans again launched a raid on the Riga airfield. They managed to set fire to two fuel tanks. Two Red Army soldiers died in single combat with a fire ...

Yes, dear reader, I fully understand your confusion. Instead of a normal story about a sudden strike by the Luftwaffe, about the flaming wreckage of red-star aircraft and "crying from impotence" commanders, there are some strange testimonies about bombing attacks on German airfields, about dispersed Soviet aircraft in advance and the "fighting mood" of Soviet pilots ... Do not worry in vain. We will search further. Who seeks - he finds:

The slumber was broken by a loud roar. I got up. In the large window, the dawn of Sunday morning, June 22, 1941, was engaged. On a grassy airfield, gray with dew, I saw funnels, like a dotted line, blocking the entire airfield (***the action takes place at the Kaunas airfield.*** - M.S.) ... A huge fire was blazing on the territory of the 15th regiment. Unexpectedly, **four triples (*hereinafter, it is emphasized by me.*** - M.S.) of Heinkel-111 bombers, accompanied by Messerschmitts, suddenly appeared

at a low altitude . As best we could, we clung to the base of the ditch. Bomb explosions covered
airfield...

Red Army soldiers and several technicians ran away from the entrance and the guardhouse to a small grove . We decided to get one by one to the surviving aircraft and try to take off along the edge of the airfield. The main airfield was full of craters... I rushed towards the headquarters of the regiment, where an I-16 fighter could be seen in the parking lot. The car was intact. Fortunately, I came across a Red Army soldier from the guards, **who did not have time to escape.** At my order, he ran for a parachute, and I rushed to the autostarter, hoping to find a driver near him. He was right there. Everything worked out well. We drove up to the plane. Out of breath, a Red Army soldier brought a parachute, explaining: **"No one was there, we had to break down the door."** Having connected the ratchets of the starter and the aircraft engine, I climbed into the cockpit. As soon as I was about to give a hand command to spin up, the car door opened, the driver jumped out and rushed towards the ditch. Looking up, I understood everything. A group of bombers was flying overhead. I had to follow the example of the driver.

Similar attempts to start the fighter engine were repeated twice. Finally, the propeller turned and the motor started working... Once in my native, familiar

environment, I felt confident. Looking at the red tiled roofs, I turned to Karmelava (***the field airfield of the 31st IAP*** - M.S.). Soon I saw the airfield, the funnels on it, lying in the rye "moment". At the edge of the forest, near the aircraft stands, there are several fires. After landing taxied to the parking lot of the squadron. Here our planes were under camouflage nets... A large group of enemy bombers appeared, accompanied by fighters. Bombs were exploding

on the airfield, fighters stormed ground targets, shooting taxiing MiGs. The flight of our fighters, which was in the air, attacked the bombers, **but after the first short burst, the machine guns did not work**. This system (synchronizer) **had not yet been debugged ...** Now, after the failure of weapons in the air, gunsmith technicians removed the hood from the engine and tried to eliminate the defect ... Feeling impunity, enemy aircraft became insolent. The bombers went group after group. In the intervals between bombing attacks, the fighters stormed all visible targets on the airfield. Literally every person was chased.

The airfield was completely covered with craters and upturned boulders. Greater were the losses in personnel. Near the parking lots of the planes in different places lay the dead in pools of gore. **At about 12** noon, a horse with a cart appeared from the side of the village.

It was our waitresses who were taking lunch to the airfield. They were dressed in colorful dresses and handkerchiefs. Almost everyone, except me, had no appetite. I quickly swallowed several portions of the second and compote. Before the girls had time to drive off, enemy bombers appeared. The entire load of bombs fell on our squadron ...

Not far from the gap, a cartwheel stuck out of the ground. The horse has disappeared. One could see a sprinkled shred of women's clothing - white with blue polka dots ... Of all the raids by German bombers during these **eight hours** of the first day of the war, this raid seemed to me the most terrible. After this raid, **it was no longer possible to take off from the airfield, and there was nothing to do**. Somewhat earlier, **seven "instants"**

took off and headed for Riga. This is all that remains of the 60 aircraft of the 31st regiment ...

Book of memoirs B.V. Veselovsky, excerpts from which were quoted above, was published in 1996. (123) The book is relatively new, but at the same time Veselovsky's story about the events of the first day of the war can be considered absolutely standard-type. This is exactly how it has always been described: a surprise attack, a sleeping airfield, non-stop German air strikes one after another, the hopeless helplessness of Soviet pilots (the planes are "not mastered", machine guns do not fire), and as a result - "take off from the airfield in eight hours it was no longer possible, and there was nothing to do with it. "

If now we "twist the sharpness" a little, then many very important details will become noticeable. At the airfield of the 15th Air Regiment in Kaunas, the pilots were awakened by the explosions of enemy bombs. There was neither an on-duty fighter unit, nor even an ordinary daylight unit that was awake all night long, at a large base airfield. The unit commander is not. There is no officer on duty. Nobody is in command. The author of the memoirs managed to take off by accident - with the help of those who "did not have time to escape." Airfields (both in Kaunas and Karmelava) are being bombed and shelled almost non-stop, by large groups of bombers, and even with fighter cover. Some private

inaccuracies become noticeable already at the first acquaintance with the text. So, for example, there were more aircraft in the 31st IAP - in addition to 60 (according to other sources - 54) new MiG-3s, there were also 32 I-16s, of which 28 were (as of June 1) in good condition. Poorly, but almost the same (32.5 cars) was the average number of serviceable aircraft in the Luftwaffe fighter groups ... The surviving archival documents do not confirm the picture of such a complete extermination of the 31st Fighter Regiment: by the time the regiment was disbanded (July 14, 1941), the pilots On the 31st IAP, they flew 714 sorties (i.e., an average of 31 sorties per day) and claimed 13 enemy aircraft shot down. (94) However, all these insignificant details only distract from the main question. Namely: such a deadly result of the first meeting with a real enemy was tragically inevitable? Or was there criminal negligence on the part of the commanders in this case? In particular, what prevented six months from checking and adjusting the work of weapons synchronizers - is it really a "sudden attack"?

Let's not puzzle over such complex issues. Everything is much easier. Before us is an example of a psychological phenomenon called "lying,

as an eyewitness. This is when, as a result of many years of ideological "pumping", a living witness begins to write not what he saw with his own eyes, but what he listened to with his ears for decades. What are these

suspicions based on? On a simple comparison with other memories of another eyewitness and participant in the same events. Testifies N.I. Petrov, fighter pilot of the 31st IAP:

... We flew from the Kaunas airfield to the Karmelava airfield, it was already 3 days before June 22, 1941. Before the flight from the Kaunas airfield, it was brought to us that the district exercises of the Air Force of the Baltic OVO would be held. Upon arrival at the Karmelava airfield, everything was **put into combat** as far as possible.

willingness...

... On the 21st, on Saturday, I took over as the unit's duty officer. **At three o'clock in the morning** on June 22, the chief of staff of the SAD, which we were part of (**8th SAD**. - M.S.), called and ordered me **to announce a combat alert**, the chief of staff of the regiment, upon arrival at the command post, call the division headquarters ... I thought it was war. I immediately handed over to the chief of staff of the regiment, Captain Sergeev, and announced the alarm for the regiment. Upon the arrival of the flight crew to the aircraft, **soon after a few minutes**, green rockets from the command post of the regiment soared into the air. Recently, there have often been combat alerts (training), **so everything was worked out, lost, who, when, what is doing** ... Having received a signal to take off, they began to take off ...

With a left turn, we headed for Kaunas, gaining 1500 meters, we saw the Kaunas airfield, the hangars were on fire, the hangar building was on fire, the regiment headquarters was on fire (**so far, a complete coincidence with Veselovsky's book**. - M.S.). Flying over the Kaunas airfield, we see **several** bomb craters on the airfield (**Veselovskiy's** "airfield was full of craters"). To the left, above 700 meters, a link of 2 pairs of Me-110 and 4 Me-109 went west at speeds "with smoke" (that is, they **turned on the afterburner mode of the engines and evaded the battle**. - M.S.). Below, on a collision course, 6 I-153 "Seagull" aircraft passed, these are neighbors from the 15th Fighter Regiment. They flew west for about 15 minutes at an altitude of 3000 m, turned back - everything is calm in the air (**alas, no traces of the bombers that repeatedly bombed the Kaunas airfield, according to Veselovsky, are found**. - M.S.) ... Everyone landed safely. How I taxied to my place,

my technician points out a crater ahead, from about a 100-kilogram bomb. This means that during our takeoff, several bombs fell on the airfield, obviously from a great height. What no one saw, and besides, it was not heard, since a lot of their engines were noisy (hence, there were no losses from these bombs - a burning plane would have been noticed at any noise. - M.S.) ... They brought breakfast, but no one who had no appetite, and then a Me-110 swept

past at low level. **The shooter from the rear hemisphere fired one burst of machine guns, but not aiming. There were no casualties ...** Later, until 16.00, everything was calm, mostly they flew in pairs **to cover their airfield** and the

railway junction of Kaunas ...

(125)

So, late breakfast (or early lunch) was. Perhaps the waitresses were in colorful dresses. The contrast of this peaceful scene with the gloomy pictures of the outbreak of war was so great that it was engraved in the memory of eyewitnesses. There was only a terrible bombing, fragments of a dress in a funnel from a bomb explosion, a pile of corpses and other "black beauty". A lone Me-110 flew by, the shooter from the upper rear machine-gun point fired a burst and, of course, did not hit anyone on the ground. After that, "until 16 hours everything was calm." There is no mention of a failed weapon on the MiGs, and there was simply no one to shoot at in the morning.

Why does the author believe that N.I. Petrova more reliable? Firstly, because they are logical, they correspond to the real situation known to us from many other documents, while Veselovsky's story corresponds only to the generally accepted legend about "a sudden attack and defenseless airfields." Secondly, Veselovsky wrote a book, and his story turned out to be very "beautiful", while Petrov simply dictated his ingenuous memoirs to the interviewer (he dictated so ingenuously that I even had to make minimal syntactic editing of this text). Thirdly, and most importantly, the bombing of the airfield in Karmelava eventually appears in Petrov's memoirs. Only at a different time ("wrong" from the point of view of the "surprise attack" dogma) and with quite realistic (confirmed enemy documents)

consequences:

... From the command post, the order: "Link - in the air!" Lieutenant Smyslov, I and Akimov quickly get on the planes. We started the engines, taxied out - and then **red rockets from the command post: "takeoff is prohibited."** Two pairs of Me-109s appear at an altitude of 800-1000 meters and pass over the airfield, then two Heinkel-111 nines approach. Explosions of bombs are heard at a distance from the airfield, it can be seen that they are being thrown along the highway. They began to fall on the border of the airfield, throwing one bomb at a time. They fall with a flight in relation to our aircraft, near which we are, almost in the middle of the airfield. A large group flew by, but only a few bombs were dropped. When they flew up to our airfield, it seemed that such a group would have nowhere to go. And they dropped only **5 bombs** on the airfield and the borders of the airfield ...

Before we had time to come to our senses, **three pairs of Me-109s** appeared, passed over the airfield at an altitude of about 1000 meters. They reorganized into an elongated bearing, **as over a training ground**, and began to shoot with aimed fire at each aircraft. First of all, on our link **(which was stopped in the middle of the airfield by a "red rocket."** - M.S.) of aircraft that were on the airfield undisguised. We managed to run to the border of the airfield, where there was a hole dried up from water. There lay a sow with piglets. We sheltered near them, where it is drier **(after that, how can you not believe in the veracity of N.I. Petrov's memoirs?** - M.S.) ... After the enemy's assault actions, he approached his plane.

Oil flows from under the hood of the engine, the crankcase is broken. The shell hit the rudder, half of the plating on the rudder was missing (it was percale). Large damage on other nearby standing planes...

The most remarkable thing about this whole fragment is the strange (to put it extremely politely) reaction of the fighter regiment to the raid of enemy bombers. There were at least three squadrons of new MiG-3 fighters at the Karmelava airfield. (94) Instead of raising them into the air and attacking slow-moving bombers moving with minimal cover, the command post stops the take-off of even those fighters that were already at the start with a rocket. Even if we don't talk about high things (Charter, Oath), such, so to speak, "tactics" does not reduce, but increases losses - if the fighter ceases to be

hunter, he becomes a game. Which was confirmed in just a few minutes. So, the 31st IAP was

really attacked at the airfield and suffered significant losses in aircraft. This happened after 4 p.m., that is, at least 12 hours after the start of the war. This blow of the enemy was neither the first nor unexpected. The pilots and commanders of the 31st IAP knew for certain that the war had begun. No orders "prohibiting the shooting down of German aircraft" (if only such orders were in reality) were no longer in effect. Losses were incurred solely and only due to the passivity of the command and personnel, which allowed the small enemy **"to shoot with aimed fire at each aircraft, as at a training ground."** The episode with the shooting of the MiGs standing on the ground finds indirect confirmation in the reports of the

German fighter squadron JG-53. Within five minutes, from 16.43 to 16.48, the headquarters flight (4 aircraft) of the II1/JG-53 fighter group allegedly shot down 6 Soviet aircraft, identified as "I-17" (German designation "MiG-3"). Group III / JG-53 operated at the junction of the Western and North-Western fronts and in this zone could only meet MiGs from the 15th or 31st air regiments. For a fighter unit, six victories in five minutes of air combat is a bit much, but for "execution, like at a training ground" - just right ...

There is in the story of N.I. Petrov, another phrase that deserves the closest attention: **"mostly flew in pairs to cover their airfield."** Here is the answer - simple, quite realistic, not requiring the invention of myths about "aviation destroyed at airfields" - to the question of why thousands of participants in the war unanimously repeat that "in the first days of the war, we did not see our aviation ". And how could the infantrymen, tankers and artillerymen see her if she was spinning in circles, "covering her airfields"? Of course, according to the story

of one middle-aged man about the military operations of one air regiment, one cannot make big generalizations. Therefore, we turn again to the reports of the "special departments" drawn up in the wake of the events. It turns out that not only nameless ordinary soldiers, but also commanders in high ranks could not find traces of the aviation of the North-Western Front: **"Aviation units of the Air Force of the Front, due to the incapacitation of all airfields** (from which, at the time of writing this report, Luftwaffe fighter groups operated quite successfully. - **M.S.) on the territory of Lithuania and most of Latvia, were relocated to various points of the airfields of the Pskov hub, however, on June 28, by 11.00, communication with air regiments, offices of the 8th, 7th and 57th air divisions was not**

installed and nothing is known about their actions ... Some commanders of air regiments and air divisions, without receiving orders from the front, move from place to place on their own (7th air division and 54th SBAP) and this further confuses the issuance of combat orders to them ... " (151)

"Moving from place to place..." An interesting wording. It is noteworthy that for all the discrepancy between the form and content of the memoirs of Veselovsky and Petrov, they tell about these "transitions" in almost the same words:

... By evening, a command was received to get into the cars. Airplanes that cannot be flown, if I am not mistaken, burn. When they set off, it became known that they were going to Riga, where the pilots would fly on the surviving aircraft, mainly the command of the regiment and squadrons. As we were approaching Riga, a rumor spread that Riga was occupied by the Germans. All the counter, traveling from Riga, confirmed this. We believed, turned around and drove along the route to Sebezh, on the former old border (I don't remember why we went there exactly) ... Having reached Sebezh, we went to the commandant's office, where the commandant explained that he had just talked to Riga and everything was fine there, no Germans it's not there, go there immediately...

... In the location of our squadron, regiment commander Putivko appeared from somewhere. His order was brief: "The personnel of the regiment **individually, whoever can**, get to Riga, to the district headquarters." Together with a classmate at the school, Lieutenant Pylaev, I headed for the highway Kaunas - Siauliai - Riga ... The air now and then resounded with the roar of German aircraft carrying a deadly load. Our planes were not visible in the sky (but how could the pilots who left their planes at an abandoned airfield see them? - M.S.) ... Soon an emka overtook us and stopped. The door opened, and the

commander of our division, Colonel Gushchin, called out to us. He asked us about the state of affairs in the regiment. To our question, how are things in the other four regiments of the division, he answered:

"We don't know anything, Veselovsky. There is no communication with anyone **(and this is true - how can you establish communication without a satellite terminal if the division commander is rushing "to Riga" in a passenger car?)**. We cannot take you with us. You see, the car is packed.

... Passing cars slipped by. It was possible to stop one of them only with the help of pistols. Finally seemed

Riga. We ended up at the district air force headquarters on June 26-27 ...

"June 26-27..." For three or four days, fighter pilots, the "golden fund" of the Armed Forces, roamed the dusty roads, while the nasty enemy "voiced the air with the roar of German aircraft." And who was supposed to prevent this? And by the way, about communication. There was a connection. More precisely, there was a technical possibility to establish a connection. And even simpler - let's quote just two phrases from the report of the new (at **that time**) head of the communications department of the North-Western Front, Colonel Kurochkin, dated July 26, 1941: ***wars used this means of communication... A break in wire communication was qualified by everyone as a loss of communication...***" (9, p. 191)

Let's sum up some results. The 1st Air Fleet of the Luftwaffe irretrievably lost 5 fighters and 36 bombers in the skies of the Baltic States from 22 to 30 June "from enemy action and for unknown reasons" (see Appendix 6). A total of 41 combat aircraft, exactly one-tenth of the original number. The losses of the Air Force of the North-Western Front were incomparably greater. In the Central Archive of the RF Ministry of Defense, a document has been preserved: "Report on the combat activities of the S-3 Air Force f. for the year of the war" and Appendix No. 2 to this report, which provides detailed data on the losses of flight personnel and military equipment, broken down by months. (168) For convenience, let's summarize all the data on aircraft losses for June 1941 in two tables: Table 26

	Not Shot down in fights.	Shot down irrevocably to the airport	Destroyed in Battle 2. A.	Non-combat lost	Total returned on June 22 in set.
MiG-3 135 8	3	6	61	53	131
"I-16" 142 32	2	47	45	13	139
I-153 359 48	7	55	132	81	323
Total: 636 88 Table 27	12	108	238	147	593

	Not Shot down in fights.	Shot down irrevocably to the airport	Destroyed in Battle 2. A.	Non-combat lost	Total returned on June 22 in set.
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"SB" 403 135 37	33	148	33	386
Ar-2 23		18	3	21
Pe-2 5	1	1		2
Total: 431 135 37	34	167	36	409

Note: in Tables 26 and 27 the number of aircraft on 22.06 is indicated according to the above Report. The first and, alas, obvious

conclusion from these tables is that the Air Force of the North-Western Front was utterly defeated. From the huge group, which had more than a thousand combat aircraft in its arsenal, only memories remained. The losses of the MiG-3 and I-16 fighters cannot but horrify, the number of which has decreased from three hundred to seven units.

Moreover, 84% of the latest fighters are destroyed or broken on the ground; only 8 out of 135 "migs" were lost in air combat. The picture of complete defeat is strikingly different from the situation on the Southwestern and even more so Southern fronts. The second and also quite clear conclusion is that the losses of the first day of the war are about one tenth of the losses of the

nine days of June. In other words, June 22 was not even the day of maximum average daily losses - not to mention the fact that this day did not become the day of the simultaneous destruction of most of the aircraft of the Air Force of the North Western Front. The total number of aircraft declared "destroyed at airfields" (405 units) is many times greater than the highest estimates of irretrievable "ground" losses on the first day of the war. This is something that is beyond doubt. Then the questions begin. The category "did not return from a combat mission" (a total of 142 aircraft) consists of fighters by three quarters - although, according to sound logic, everything should have been exactly

the opposite: a bomber flies (sometimes far and at night) behind the front line, and its fate may not always be installed; fighters in June 41 fought (if they fought) in the sky over their own airfields, over cities and railway stations not yet occupied by the enemy. How to explain the fact that there were more fighter planes "missing in action" than those shot down in air combat and anti-aircraft guns combined? The strange "case" that hit fighter planes is also striking: 40% of brand new, recently from the MiGs factory and 23% of not old at all (production peaked in 1940, when two-thirds of the total number were produced) "seagulls" irrevocably broke/crashed within nine days. At the same time, non-combat losses of bombers amounted to less than one tenth of the original number. This is strange: